



Kerman Oral and Dental
diseases research center



Kerman University of Medical
Sciences and Health Services

Iranian Association of Oral Medicine 2014 Meeting and First National Congress on Orofacial Pain

Kerman, Iran, 15-17 October 2014

Volume 3, Supplement, Autumn 2014

Journal of Oral Health & Oral Epidemiology

Official Journal of Kerman Oral and Dental Diseases
Research Center

Scientific Research Journal

Online ISSN 2322-1372

[Http://johoe.ir](http://johoe.ir)
johoe@kmu.ac.ir

Journal of Oral Health & Oral Epidemiology

Volume 3, Supplement, Autumn 2014

Global Year Against OROFACIAL PAIN

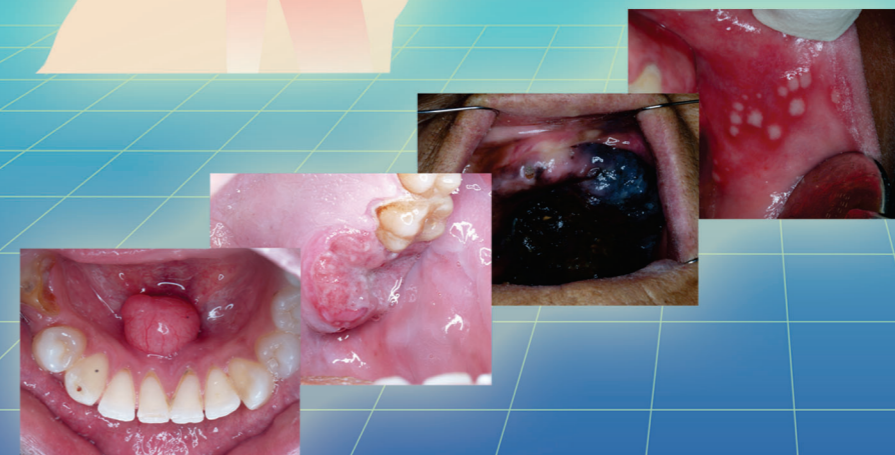


Oral Medicine Update

- Oral ulcerations
- Oral cancer and precancer
- Oral lichenoid lesions

Orofacial Pain Update

- Odontogenic toothache
- Trigeminal neuropathic pain
- Trigeminal neuralgia
- Burning mouth syndrome
- Primary headaches
- Temporomandibular disorders



Journal of Oral Health & Oral Epidemiology

License Holder: Vice chancellor for Research, Kerman University of Medical Science.

Chairman: Arash Shahravan, DDS, MS

Editor- In- Chief: Masoud Parirokh, DDS, MS

Associate Editor: Maryamalsadat Hashemipour, DDS, MS

Executive Manager: Shiva Pour Adeli

Office Management: Forozan Rafiee

Editorial Board:

Paul V. Abbott, Winthrop Professor of Clinical Dentistry, Endodontic Department, School of Dentistry, University of Western Australia.

Parviz Amini, Associate Professor, Prosthodontic Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Saeed Asgary, Full Professor, Iranian Center for Endodontic Research, Research Institute of Dental Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Shahin Bayani, Assistant Professor, Orthodontic Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Mohammad Jafar Eghbal, Full Professor, Iranian Center for Endodontic Research, Research Institute of Dental Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Ali Eskandarizadeh, Associate Professor, Operative Dentistry Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Javad Faryabi, Associate Professor, Oral & Maxillofacial Surgery Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Jamileh Ghouddosi, Full Professor, Endodontic Department, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran.

Jahangir Haghani, Associate Professor, Oral & Maxillofacial Radiology Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Maryam Alsadat Hashemipour, Assistant Professor, Oral Medicine Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Shahla Kakoei, Associate Professor, Oral Medicine Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Mohammad Reza Khammi, Associate Professor, Dental Research Center, Community Oral Health Department, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran.

Zahra Saied Moallemi, Assistant Professor, Oral Public Health Department, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran.

Tayebeh Malek Mohammadi, Associate Professor, Dental Public Health Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Mohammad Mohammadi, Assistant Professor, Periodontics Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Nouzar Nakhaee, Full Professor, Kerman Neuroscience Research Center, Kerman University of Medical Sciences, Kerman, Iran.

Masoud Parirokh, Full Professor, Endodontic Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Hamid Reza Poureslami, Professor, Paediatric Dentistry Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Maryam Rad, Specialist of Oral Medicine, PhD Candidate of Oral Epidemiology, Oral & Dental Diseases Research Center, Kerman University of Medical Sciences, Kerman, Iran.

Seyed Mohammad Reza Safavi, Full Professor, Iran Center for Dental Research, Research Institute of Dental Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Arash Shahravan, Associate Professor, Endodontic Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Molouk Torabi Parizi, Associate Professor, Oral & Maxillofacial Pathology Department, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

Journal's Office: Oral and Dental Diseases Research Center, Kosar Blvd, Kerman, Iran, 7618836555

Tel/Fax: +98 34 32133440

Email: johkmu@kmu.ac.ir

Email: johkmu@yahoo.com

www.johoe.kmu.ac.ir

Copy edit, Layout edit, Design, and Print:

Farzanegan Radandish Co.

Postal Code: 81465-1798, Isfahan, Iran

Tel: +98 31 36686302

Email: f.radandish@gmail.com

www.farzaneganco.ir



**Iranian Association of Oral Medicine 2014 Meeting and
First National Congress on Orofacial Pain Kerman, Iran**

15-17 October 2014



Dear Colleagues,

It is my pleasure and honor to welcome you all in Kerman at the 5th Iranian Oral Medicine Association meeting and 1st national congress on orofacial Pain. We hope this meeting will be as pleasant and fruitful as the previous ones. We have chosen for a format in which keynote lectures in the field of oral medicine and orofacial pain are followed by shorter academic lectures. We have also scheduled a panel for case presentation and case analysis which is new in this meeting. In addition, we have a poster presentation session and all the posters can be viewed at every coffee and tea break to promote discussion and a maximum exchange of results.

We are intending to prepare and deliver a memorable scientific meeting for the years to come. We wish all participants enjoyable days in Kerman.

With warmest regards,
M. Reza Zarei, DDS, MSc



Iranian Association of Oral Medicine 2014 Meeting and
First National Congress on Orofacial Pain Kerman, Iran

15-17 October 2014



Congress President

Dr. Ali Akbar Haghdoost
Professor, Department of Biostatistics and Epidemiology, School of Public Health, Kerman University of Medical Sciences, Keramn, Iran

Scientific Secretary

Dr. Mohammad Reza Zarei
Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Keramn University of Medical Sciences, Keramn, Iran

General Secretary

Dr. Goli Chamani
Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Keramn University of Medical Sciences, Keramn, Iran

Executive Secretary

Dr. Maryam Sadat Hashemipour
Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Scientific Committee

Aghahosseini Farzaneh	Hashemipour Maryam Sadat	Poureslami Hamid Reza
Akhlaghinasab Hossein	Hosseinfar Bahareh	Rad Maryam
Alaie Arezoo	Javad Zadeh Abbas	Reza Forghani Farshid
Amanpour Sara	Kakouei Shahla	Sahebamee Mahnaz
Amini Parviz	Kalantari Mahsa	Shafiee Leili
Askarifard Sara	Lotfi Soudabeh	Shahab Sharyar
Ayatollahi Mosavi Seyed Amin	Malek Mohammadi Tayebeh	Shahpasand Zadeh Mohammad
Baharvand Maryam	Mansouryan Arash	Hossein
Chamani Goli	Mohammadi Mohammad	Taghavi Zenouz Ali
Eskandarizadeh Ali	Mohseni Mohabbat	Taheri Jamileh Beigom
Faryabi Javad	Mousavi Fahimeh	Tohidast Ekraz Zahra
Ghaem Maghami Ahmad	Navabi Nader	Torabi Molouk
Haerian Ahmah	Pardakhti Abbas	Zarei Mohammad Reza
Haghani Jahangir	Parirokh Masoud	

Executive Committee

Abbas Zadeh Elham	Hasanisefat Mohsen	Pouradeli Shiva
Akbar Kalami Ali	Heidarizadeh Reza	Pourgharibshahi Somayeh
Alavi Marzieh	Hossein Zadeh Hossein	Pouyafard Adeleh
Alimoradi Elham	Iranmanesh Maryam	Rafsanjani Elaheh
Amin Jaffari Pouya	Jafarzadeh Mahmoud	Rezaei Shahin
Arabi Mehri	Kakouei Sina	Rezvani Nejad
Ayoubi Shahla	Khani Rabeeh	Sadegh Tab Mohammad
Bahonar Elham	Kheirmand Parizi Marjan	Sadeghi Hasan
Barjesteh Mahdiyeh	Mansouri Mojdeh	Salari Ali
Emadian Reza	Mansouri Mophammad	Salehi Negar
Fekrat Faranak	Mirahmadi Hamideh	Shamsaddini Azam
Ghanbari Simin	Mirshakari Ahad	Sheikhholeslam Azar
Gharaee Zahra	Mohammadipournajib Parvin	Tahmasbi Elaheh
Hajipour Mina	Mohtasham	Tavakolinejad Zahra
Hasani Mehdi	Mousapour Masoumeh	Zangiabadi Pari
Hasani Sima	Nazari Fereshteh	Zeraatkar Vahideh

*Keynote
Orations*



Burning Mouth Syndrome

Goli Chamani DDS, MSc¹

¹ Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: golichamani@yahoo.com

Abstract

BACKGROUND AND AIM: Most clinicians dread seeing the patient presenting with a primary complaint of a burning pain on one or more oral mucosal surfaces. Unlike most other clinical conditions presenting in a dental office, burning mouth syndrome (BMS) is poorly understood with few evidence based remedies. BMS is an important clinical condition with aggravating symptoms, directly and indirectly impacting the quality of life, which often places a recognizable burden on the patient and health care system. It is associated with many oral and systemic conditions. Dentists should be able to evaluate, diagnose and properly manage these patients. Multidisciplinary approach including medical and psychosocial therapy may be effective in symptom relief in patients with BMS. Recently, advances have been made towards clarifying the possible etiology of the disorder and testing the possible therapeutic modalities available. This lecture focuses on various aspects of BMS, including its pathophysiology, etiology, clinical presentation, current treatment, and general prognosis.

KEYWORDS: Burning Mouth Syndrome, Treatment, Etiology.

The role of dentists in diagnosis and management of sleep disorders

Goli Chamani DDS, MSc¹

¹ Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: golichamani@yahoo.com

Abstract

BACKGROUND AND AIM: Dentistry is unique among the health professions in that annual examination and close personal relationships that often develop between dentist and patient afford dentists the opportunity to closely monitor the medical health of their patients. Both snoring and obstructive sleep apnea have been implicated causally and otherwise in cardiac disease, myocardial infarction, irregular heart beat, hypertension, diabetes, stroke, depression, and erectile dysfunction to say nothing about vehicular and occupational accidental injury, and death. In addition recently a retrospective population-based cohort study showed that non-apnea sleep disorder increases the risk of periodontal disease. Oral appliance therapy has been accepted as an alternative or supplement to CPAP in some patients and yet the public and many dentists remain unaware of the vital role of the dentist as part of the healthcare team for the recognition and management of snoring and obstructive sleep apnea. This lecture will be focused on the importance of dental sleep medicine and the role of dentists in diagnosis and management of sleep disorders.

KEYWORDS: Dentists, Sleep disorders, Management.

Tumor markers as diagnostic-prognostics factors

Shahryar Dabiri MD¹

¹ Professor, Department of Pathology, Afzalipour Medical School, Kerman University of Medical Sciences, Kerman, Iran
Email: sh_dabiri@kmu.ac.ir

Abstract

BACKGROUND AND AIM: Tumor marker is a biomarker found in the blood, urine, or body tissues that can be elevated in cancer, among other tissue types. There are many different tumor markers, each indicative of a particular disease



process, and they are used in oncology to help detect the presence of cancer. An elevated level of a tumor marker can indicate cancer; however, there might be also be other causes of the elevation.

Tumor markers can be produced directly by the tumor or non-tumor cells as a response to the presence of a tumor. Most tumor markers are tumor antigens, but not all tumor antigens can be used as tumor markers. Although mammography, ultrasonography, computed tomography, magnetic resonance imaging scans, and tumor marker assays help in the staging and treatment of the cancer, they are usually not definitive diagnostic tests.

Uses of tumor markers can broadly be classified as follows:

- For screening for common cancers on a population basis: elevated prostate specific antigen (PSA) suggests prostate cancer.
- For monitoring of survivors of cancer after treatment: elevated AFP in a child previously treated suggests relapse with endodermal sinus tumor.
- For diagnosis of specific tumor types, particularly in certain visceral tumors where biopsy is not feasible.
- For therapy and follow-up of Her2-neu positive breast cancer by Herceptin (Target therapy).

KEYWORDS: Tumor markers, Biomarker, Cancer.

SUNCT syndrome, diagnosis and management

Hooman Ebrahimi DDS, MSc¹, Sara Pourshahidi DDS, MSc²

¹ Assistant Professor, Oral Medicine Specialist-Fellowship in Orofacial Pain, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran
Email: hooman.ebrahimi@yahoo.com

Abstract

BACKGROUND AND AIM: SUNCT is a rare syndrome representing short term unilateral neuralgia like head ache with conjunctivitis and tearing. The syndrome is more common in men with mead age of 50-51 years old. The attack mostly initiates at trigeminal dermatome and V1 involvement is more common but can occur at any site. The pain often concentrates around eyes and above them and also in temporal region. The pain is usually unilateral and accompanied with autonomic signs at the same side. Reviewing the articles in “Med Line “, “Pubmed” , “Scopus” and reference books since 2000. SUNCT is a refractory pain. The treatment of choice is anticonvulsants specially Lamotrigine in a high dose and long term regimen.

KEYWORDS: Head ache, Neuralgia, Lamotrigine.

New approaches to the diagnosis and treatment of pemphigus

Ali Reza Fekri MD¹

¹ Professor, Department of Dermatology, School of Medicine, Kerman University of Medical Sciences, Kerman, Iran
Email: fekiar@yahoo.com

Abstract

BACKGROUND AND AIM: Pemphigus is a group of rare skin disorders that cause blisters of your skin or mucous membranes, such as in your mouth or on your genitals. There are two main types: pemphigus vulgaris and pemphigus foliaceus. Pemphigus vulgaris is the most common form. Pemphigus can occur at any age, but often strikes people in middle age or older. Usually a chronic condition, pemphigus is best controlled by early diagnosis and treatment, which may include medications or treatments similar to those used for severe burns. Pemphigus is recognized by a dermatologist from the appearance and distribution of the skin lesions. It is also commonly diagnosed by specialists practicing otolaryngology- head and neck surgery, periodontists, oral medicine, and eye doctors, as lesions can affect the eyes and mucous membrane of the



oral cavity. Intraorally it resembles the more common diseases lichen planus and mucous membrane pemphigoid. Definitive diagnosis requires examination of a skin or mucous membrane biopsy by a dermatopathologist or oral medicine.

KEYWORDS: Pemphigus, Blisters, Pemphigus vulgaris, Pemphigus foliaceus.

Medical professionalism

Ahmad Haerian DDS, PhD, FICD¹

¹ Associate Professor, Department of Periodontics, School of Dentistry, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
Email: ahmad.haerian@gmail.com

Abstract

BACKGROUND AND AIM: Professionalism is central to sustaining the public's trust in the medical profession; it is the essence of the doctor–patient relationship. Evidence exists that public trust is waning and that doctors are facing powerful contemporary threats to their professional values by commercialism. The role of medical education is paramount in preparing future doctors to recognize and overcome these threats; to do so will require substantial change in the culture and environment of medical education. This topic aims to provide a definition and framework for professionalism in the context of medical education and practice, describe current threats to medical professionalism, and detail the role medical schools and academic medical centers can play in preparing tomorrow's doctors to recognize and resist these threats. Additionally, this topic reviews established and potential methods for measuring professionalism and thus assuring public accountability. Finally, specific recommendations are offered for doctors, medical schools and teaching hospitals to nurture and sustain professionalism in relation to their patients and colleagues. The progressive intrusion of commercialism into the realm of medicine is threatening to replace the ethics of professionalism with the irreconcilable ethics of the marketplace. Academic medicine must assume greater responsibility and accountability for strengthening the resolve of future doctors to sustain their commitment to the ethics of professionalism. It can do so by improving the medical school admission process, enhancing both formal and experiential teaching of professionalism, and purging the educational environment of unprofessional practices. Finally, some recommendations and approaches that academic medicine might adopt to achieve these goals are provided.

KEYWORDS: Professionalism, Medical Education, Medical Practice, Trust, Physician-patient Relations, Commercialism.

Trigeminal neuralgia: an update

Abbas Javadzadeh Bluori DDS, MSc¹

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Science, Mashhad, Iran
Email: blouria@mums.ac.ir

Abstract

BACKGROUND AND AIM: Trigeminal neuralgia is one of the worst pains in the world. It is characterized by unilateral, short-lived, excruciating, lancinating, electrical pain in one or more branches of the trigeminal nerve. The pain can be brought on by innocuous stimuli such as eating, washing, and shaving. Trigeminal neuralgia is a rare cause of dental pain. However, when presents as toothache, it could lead to diagnostic challenges, misdiagnosis, and unjustified dental procedures such as root canal therapy or extraction. Trigeminal neuralgia is classified into two groups: idiopathic or classical trigeminal neuralgia and secondary or symptomatic trigeminal neuralgia. Up to 15% of cases are symptomatic trigeminal neuralgia which results from intracranial pathology such as brain tumors, aneurysm, or multiple sclerosis. The classic symptoms are sometimes not seen in patients with secondary trigeminal neuralgia. In these patients, pain can be associated with sensory deficits and positive neurological symptoms. Management of trigeminal neuralgia includes anticonvulsant medications and in refractory cases surgical intervention.

KEYWORDS: Trigeminal neuralgia, Multiple sclerosis, Pain.



Lymphadenopathy: etiology, diagnosis, management and treatment

Behjat Sadat Kalantray MD¹

¹ Assistant Professor, Department of Internal Medicine, School of Medicine, Kerman University of Medical Sciences, Kerman, Iran
Email: dr.shojaie.m@gmail.com

Abstract

BACKGROUND AND AIM: Lymphadenopathy may be a primary or secondary manifestation of numerous disorders. The physician will be aided in the pursuit of an explanation for the lymphadenopathy by a careful medical history, physical examination, selected laboratory tests, and perhaps an excisional lymph node biopsy. In one study, researchers reported that 84% patients referred for evaluation of lymphadenopathy had a "benign" diagnosis and the remaining (16%) had a malignancy. The size and texture of the lymph node(s) and the presence of pain are useful parameters in evaluating a patient with lymphadenopathy. Soft, flat, lymph nodes (1 cm) are often palpable in healthy children and young adults, and healthy adults may have palpable inguinal nodes of up to 2 cm, which are considered normal. The texture of lymph nodes may be described as soft, firm, rubbery, hard, discrete, matted, tender, movable, or fixed. Tenderness is found when the capsule is stretched during rapid enlargement, usually secondary to an inflammatory process. Some malignant diseases such as acute leukemia may produce rapid enlargement and pain in the nodes. Nodes involved by lymphoma tend to be large, discrete, symmetric, rubbery, firm, mobile, and nontender. Nodes containing metastatic cancer are often hard, nontender, and nonmovable because of fixation to surrounding tissues. The laboratory investigation of patients with lymphadenopathy must be tailored to elucidate the etiology suspected from the patient's history and physical findings. The indications for lymph node biopsy are imprecise, yet it is a valuable diagnostic tool. The decision to biopsy may be made early in a patient's evaluation or delayed for up to 2 weeks. Prompt biopsy should occur if the patient's history and physical findings suggest a malignancy.

KEYWORDS: Lymphadenopathy, Etiology, Treatment.

Cone beam computed tomography in oral medicine: indications and interpretation

Reza Motaghi DDS, MSc¹

¹ Assistant Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: reza.m85@gmail.com

Abstract

BACKGROUND AND AIM: Since the introduction of cone beam computed tomography (CBCT) as a 3 dimensional imaging technique, several fields in dental medicine were affected including oral medicine. CBCT can reveal important characteristics of a pathologic lesion including its exact anatomic position, shape and behavior. However, the higher effective dose of radiation compared to 2-dimensional radiographs is not justifiable in every case. The aim of this review is to discuss the CBCT indications in oral medicine, how to interpret a CBCT and review CBCT examples of some common oral lesions.

KEYWORDS: Cone beam computed tomography, Oral medicine, CBCT.

Tooth pain and important points that should be noticed by dentists

Masoud Parirokh DDS, MSc¹

¹ Professor, Department of Endodontic and Oral and Dental Research Center, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: masoudparirokh@yahoo.com

Abstract

BACKGROUND AND AIM: One of the most prevalent forms of orofacial pain is originated from the teeth. Therefore,



diagnosis of pain with tooth origin is an important subject in dentistry. Sometimes, despite careful examination dentist could not find the source of pain and may be confused to suggest a treatment plan for the patients. Research studies have shown that referral pain is a frequent culprit for error of dentists diagnosis. Previous investigations have shown that neural convergence and central sensitization are important reasons for referral pain. Dentists should take a careful dental history as well as chief complain and subjective symptoms from the patients and examine their teeth and soft tissues to rule out all possible sources of pain. In addition to traditional diagnostic tests such as electric pulp tester, cold and heat sensitivity tests, periapical tests, and conventional radiography, other diagnostic tools such as mechanical allodynia tester as well as radiographic evaluation by using computed cone beam tomography can be employed for final diagnosis. In this presentation, several complicated cases that had been diagnosed with careful examination would be presented.

KEYWORDS: Tooth pain, Referral pain, Central sensitization.

Cone beam computed tomography imaging in patients with temporomandibular disorders

Shahryar Shahab DDS, MSc¹

¹ Assistant Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Shahed University of Medical Sciences, Tehran, Iran
Email: sh.shahab@mailcity.com

Abstract

BACKGROUND AND AIM: Radiographic examination is essential for the diagnosis and management of temporomandibular joint (TMJ) disorders. The goals of TMJ radiography are to evaluate cortical and trabecular architecture of the bony structures and confirm their integrity, to assess the extent and monitor progression of osseous changes, and to evaluate the response to treatment. Cone beam computed tomography (CBCT) provides high-resolution multiplanar images and delivers substantially lower radiation dose, compared with multislice CT. CBCT allows examination of TMJ anatomy without superimposition and distortion to facilitate analysis of bone morphology, joint space and dynamic function in all three dimensions.

KEYWORDS: Cone beam computed tomography, Temporomandibular disorders, CBCT.

Sjögren syndrome

Mohammad Reza Shakibi MD¹

¹ Associate Professor, Department of Rheumatology, School of Medicine, Keramn University of Medical Sciences, Keramn, Iran
Email: mrshakibi@gmail.com

Abstract

BACKGROUND AND AIM: Sjogren syndrome (SS) is a chronic autoimmune disease characterized by lymphocytic infiltration of the salivary, lacrimal, and other exocrine glands, dryness of the eyes and mouth, and circulating autoantibodies. It is best defined as the triad of dry eyes, dry mouth, and evidence of an autoimmune process mediating these and other clinical manifestations.

METHODS: It is characterized by a predilection for women of perimenopausal and postmenopausal age, a remarkably stable course in the absence of treatment, diverse symptoms, and heightened risk for B-cell non-Hodgkin lymphoma.

RESULTS: Antibodies to the small ribonucleoprotein particles SSA and SSB are present in a high proportion of patients. SS may occur alone (primary) or together with another well-established systemic autoimmune disease (secondary) such as systemic lupus erythematosus, rheumatoid arthritis, or systemic sclerosis. The pathogenesis of SS involves mechanisms leading to targeted inflammation of the lacrimal and salivary glands and B-lymphocyte hyperactivity.

CONCLUSION: Management is focused on amelioration of the salivary and lacrimal dysfunction and the use of



immunomodulatory or immunosuppressive drugs for certain extraglandular manifestations.

KEYWORDS: Sjögren syndrome, Autoimmune disease, Non-Hodgkin lymphoma.

Ulcerative Oral Lichen Planus

Ali Taghavi Zenous DDS, MSc¹, Masoumeh Mehdipour DDS, MSc²

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran.

² Associate Professor, Department of Oral Medicine, School of Dentistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran
Email: taghaviz_a@hotmail.com

Abstract

BACKGROUND AND AIM: Oral Lichen Planus (OLP) is a chronic inflammatory disease with unknown etiology considering the fact that ulcerative type of OLP is symptomatic and it's known as a premalignant lesion, it is very important. A lot of researches have been carried out in order to find etiology, pathogenesis, treatment. Oral Medicine Department of Faculty of Dentistry of Tabriz University of Medical Sciences, is one of the centers in which many researches have been planned in this field.

METHODS: Six researches are mentioned in this part.

RESULTS: 1. Predisposing agents: The salivary cortisol and stress level in patient group was higher than the control group (case-control study). 2. Relationship with other diseases: No significant association was found between OLP and H.Pylori by using UBT (case control study). 3. Pathogenesis and immunology: Serum TNF level was higher in the study group and serum TGF-B level was lower in the control group (case-control study). 4. Treatment: A: Administration of Propolis decreased IL-17 serum levels, pain and burning sensation severity and size of OLP lesions (clinical trial study). B: Mycophenolate Mofetil mucoadhesive was effective in decreasing pain severity and size of OLP lessons (clinical trial study). C: Full-thickness removal of lesions in desquamative gingivitis (as a type of OLP) in comparison to administration of topical Adcortyl was more effective in short term; but in long term lesions recurred (A case presentation).

CONCLUSION: It seems that OLP is a disease with multi factorial etiology with immunologic pathogenesis. Therefore, some oral or local immunomodulating treatments can regress the lesions at least in short term.

KEYWORDS: Oral Lichen Planus, Propolis, Mycophenolate, Mofetil, Stress, Interleukin.

Traumatic trigeminal neuropathy: a review

Mohammad Reza Zarei DDS, MSc¹

¹ Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Keramn University of Medical Sciences, Keramn, Iran

Email: zarei66@yahoo.com

Abstract

BACKGROUND AND AIM: Traumatic trigeminal neuropathy results from traumatic damage of the peripheral trigeminal branches, usually v2 and v3 sensory fibres. This could happen following local anaesthetic injection, minor oral surgery, endodontic treatments, jaw fractures, and many dental procedures. The patient with traumatic trigeminal neuropathy usually complains of negative symptoms such as numbness and positive symptoms such as burning pain and paresthesia in the dermatome of the affected nerve. Traumatic trigeminal neuropathy is diagnosed on the basis of history and clinical findings, after ruling out other causes of chronic pain such as myofascial pain of masticatory muscles. Management of neuropathic pain is difficult. Tricyclic antidepressants such as amitriptyline, serotonin norepinephrine reuptake inhibitors (SNRIs) such as venlafaxine, and gabapentinoids such as pregabalin are the most common medications used in the management of neuropathic pain.

KEYWORDS: Traumatic, Trigeminal neuropathy, SNRIs.



Oral precancerous lesion: a review

Mohammad Reza Zarei DDS, MSc¹

¹ Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Keramn University of Medical Sciences, Keramn, Iran
Email: zarei66@yahoo.com

Abstract

BACKGROUND AND AIM: Premalignant or precancerous (also referred to as “potentially malignant”) oral lesions involve the oral mucosa and may be at risk for transforming into an oral cancer, although it is difficult to predict which lesions will transform and how long it will take. Leukoplakia, an obvious white keratotic plaque which can not be identified clinically and histopathologically as another entity, is considered to be the most common oral malignant lesion. However, a premalignant lesion could also present as a red lesion which is called erythroplakia. Oral premalignant lesions are usually asymptomatic. The development of pain or soreness may be associated with a malignant change. A diagnostic biopsy should be considered for any mucosal lesion that persists for more than 14 days after obvious irritants are removed; simply noting the clinical appearance or presentation of a lesion is not enough to determine premalignant changes. Surgical excision, which is accomplished with a CO2 laser, is the treatment of choice for lesions with moderate to severe dysplasia. Regular follow up of the patient for the rest of life is recommended.

KEYWORDS: Oral precancerous lesion, Erythroplakia, Leukoplakia.

*Academic
Lectures*



Management of medical emergencies in the dental setting: assessment, analysis, and associated dental management guidelines

Tahmoores Abdollahian DDS, MSc¹, Solmaz Pourzare Mehrbani DDS, MSc¹, Hossein Eslami DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran
Email: solmaz_pourzare@yahoo.com

Abstract

BACKGROUND AND AIM: Every practitioner aware that at one time or another, medical emergencies can happen. With proper assessment and care, however, the emergency can be successfully triaged and resolved. Prevention of medical emergencies in the key, and every effort should be made to assess each patient thoroughly prior to treatment. Steps should be incorporated to prevent emergencies from happening; this section discusses and details how to deal with these emergencies. Preventive measures implemented to avoid medical emergencies in the dental setting are thorough assessment of medical history, thorough physical examination, and appropriate treatment planning. Thorough medical history assessment should establish the following:

- The patient's current medical status
- The current list of medications used daily or PRN (as and when needed): prescribed and over-the-counter (OTC) medications
- The patient's compliance with medications
- Any history of medical or surgical complications requiring hospitalization within the previous 2 years
- Any history of allergies
- Any history of corticosteroid intake, currently or within the previous 2 years
- Any history of adverse reactions or feelings about visiting a dentist: anxiety, fear, or avoidance
- Personal habits, alcohol intake, "recreational" drug use

A thorough physical examination should include an assessment of the following:

- General physical appearance
- Vital signs: pulse, blood pressure, respiration rate, temperature, height and weight
- Examination of the head and neck
- Assessment of the respiratory system

Assessment of the Treatment plan should include the following:

- Assessment of the type of anesthetics, analgesics, and antibiotics that can be safely used during dentistry
- Assessment of whether the patient needs to be pre medicated
- Assessment of whether the patients needs to bring emergency medications for all dental visits: nitroglycerin, inhalers, sugar pills
- Assessment of whether stress management is needed

KEYWORDS: Management, Medical emergencies, Dental.

Anxiety and Depression between patients with oral lichen planus

*Hakimeh Ahadian DDS, MSc¹, Mohammad Hossein Akhavan Karbasi DDS, MSc¹,
Abbas Javadzadeh Bluori DDS, MSc², Ehsan Javadzadeh Bluori DDS³*

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Shahid Sadoughi University of Medical Science, Yazd, Iran

² Associate Professor, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Science, Mashhad, Iran

³ Dentist, School of Dentistry, Mashhad University of Medical Science, Mashhad, Iran

Email: dr_ahadian@yahoo.com

Abstract

BACKGROUND AND AIM: Many studies have investigated the role of psychiatric disorders such as Anxiety and Depression in development of OLP. The purpose of this study was to compare Anxiety and Depression in OLP patients with controls using a set of questions extracted from SCL-90 questionnaire.



METHODS: This analytical study which conducted in case-control method at Department of Oral Medicine, Shahid Sadoughi Dental School (Yazd-Iran) from November 2012 to May 2013, anxiety and depression were assessed in a total of 80 patients with oral lichen planus (case group) and 160 healthy controls, using a set of questions extracted from SCL-90 questionnaire. SPSS version 16 for Windows was utilized for statistical analysis of information obtained from this research using ANOVA, t-test and Chi-square tests.

RESULTS: Among of subjects, that majority of those (67.5%) were women, anxiety and depression scores in OLP patients (Case group) were significantly greater than Controls (P-values obtained for Anxiety and Depression were respectively 0.033 and 0.027). However no significant correlation was observed between anxiety /depression and clinical patterns of OLP.

CONCLUSION: Findings of this study which demonstrated higher levels of anxiety and depression in relation with OLP, suggests them as psychological etiologic factors for oral lichen planus.

KEYWORDS: Oral Lichen Planus, Anxiety, Depression, Psychological Disorders, Psychiatric Disorders, SCL-90, Symptom Check List-90.

Does complementary medicine relieve dental pain?

Arezoo Alaie DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran
Email: peter_chek@yahoo.com

Abstract

BACKGROUND AND AIM: Complementary medicine is defined as additional treatment modalities which influences patient management from a variety of aspects. They reduce the symptoms of disease or increase pain threshold in human. In dentistry, it can help treat some periodontal disease, xerostomia, TMJ disorders, or alleviate the side effects of pain and anxiety associated with chemotherapy and head and neck cancer treatments. Experts recognize different categories for complementary medicine which includes: landscape therapy, music therapy, massage, physical exercise, ect. This article explains indications for complementary medicine in management of pain and anxiety resulting from dental treatment.

KEYWORDS: Complementary medicine, Dentistry, Anxiety, Pain.

Efficacy of topical and systemic vitamin E in preventing chemotherapy-induced oral mucositis

Somayeh Alirezaei DDS, MSc¹, Ahmad Reza zadeh Mafi MD², Arash Azizi DDS, MSc³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran

² Clinical Oncologist, Tehran, Iran

³ Associate Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran
Email: Dr.somayehalirezaei@gmail.com

Abstract

BACKGROUND AND AIM: There is still no consensus regarding the optimum treatment of chemotherapy-induced oral mucositis and its management is still mainly supportive. Vitamin E has been shown to be effective in reducing the symptoms of oral mucositis. Aim of this study was to assess the efficacy of prophylactic systemic and topical vitamin E in reducing the signs and symptoms of oral mucositis in patients receiving chemotherapy.

METHODS: We conducted a randomized trial among 76 patients with a hematologic malignancy treated with chemotherapy. Patients were randomly assigned into three groups. The supplementation with 200 mg/d vitamin E (group 1) and vitamin E



paste (group 2) was administered from 1 day before each cycle of chemotherapy till 20 days after completion of each cycle. Group 3 did not receive any treatment. Oral exam was performed 7-10 days after each cycle chemotherapy.

RESULTS: Patients in group 2 and 3 did not show any difference in degree of mucositis or severity of pain. However, after the second cycle, patients who were treated with topical vitamin E showed significantly less oral pain, and had fewer cases of severe mucositis compared to groups 2 and 3.

CONCLUSION: Topical vitamin E could be beneficial in reducing the severity of oral mucositis, but no therapeutic gain would be achieved by using systemic vitamin E in this regard.

KEYWORDS: Vitamin E, Chemotherapy, Oral mucositis.

Carcinoma-ex-pleomorphic adenoma; A rare case report

Sara Amanpour DDS, MSc¹, Sorena Fardisi DDS², Reza Tabrizi DDS, MSc³, Mohammad Javad Ashraf DDS, MSc⁴

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Postgraduate Student, Department of Oral and Maxillofacial Surgery, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

³ Assistant Professor, Department of Oral and Maxillofacial Surgery, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

⁴ Associate Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

Email: saraamanpour@gmail.com

Abstract

BACKGROUND AND AIM: Malignant transformation of the epithelial component of a previously benign pleomorphic adenoma to squamous cell carcinoma is a rare phenomenon. When malignant transformation occurs, the malignant component is a poorly differentiated adenocarcinoma in most cases but any type of carcinoma is probable. A 50-year-old woman was referred to the oral medicine department with a history of facial swelling in her left infraorbital area for one year. Clinical examination revealed exophthalmoses of left eye. In panoramic radiography there was a destructive lesion causing complete opacification of left maxillary sinus. CT scans depicted a large ill-defined destructive mass in left maxillary sinus. Histological examination of the specimen obtained by incisional biopsy showed pleomorphic adenoma of minor salivary glands with malignant transformation to squamous cell carcinoma. The lesion was completely excised and histopathologic examination confirmed the initial diagnosis. Malignant transformation of minor salivary gland tumors is rare but it should be considered in differential diagnosis of destructive lesions of the maxillary sinus.

KEYWORDS: Malignant transformation, Pleomorphic adenoma, Maxillary sinus.

Histopathologic features of oral lichen planus: WHO or modified WHO? This is the problem!

Pouyan Amini Shakib DDS, MSc¹

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

Email: pouyanshakib@yahoo.com

Abstract

BACKGROUND AND AIM: Lichen planus is a common chronic muco-cutaneous disease with a prevalence ranging from 0.2 to 4%. The cause of lichen planus is unknown; it is generally considered to be an immunologically mediated process. Indeed oral lichen planus (OLP) is considered as a chronic disease with dynamic evolution for which several panels of diagnostic criteria, such as WHO and the modified WHO, have been proposed to render a more reliable and



accurate diagnosis. In this presentation, we introduce and analyze current microscopic diagnostic approaches and emphasize on challenging ideas in this way.

KEYWORDS: Oral Lichen Planus, Diagnosis, Pathology.

A Comparison between therapeutic effects of curcumin with the existing treatment of erosive -atrophic oral lichen planus: A double blind randomize clinical trial study

*Maryam Amirchahmaghi DDS, MSc¹, Atessa Pakfetrat DDS, MSc¹,
Hanieh Ghalavani DDS, MSc², Zahra Delavarian DDS, MSc¹*

¹ Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

² Specialist of Oral Medicine, Mashhad, Iran
Email: amirchahmaghim@mums.ac.ir

Abstract

BACKGROUND AND AIM: Oral Lichen Planus (OLP) is a common chronic mucocutaneous disease. Patients with atrophic and erosive lichen planus often have symptoms of soreness and need proper treatment. The main therapy of OLP has been administration of topical or systemic corticosteroids. Because side effects of corticosteroids therapy (high blood pressure, adrenal suppress, etc), today, trends toward natural or herbal origin drugs with antioxidant and anti-inflammatory properties with or without corticosteroids are come into view. The purpose of this study is to compare therapeutic effect of curcumin with the existing treatment of erosive -atrophic oral lichen planus.

METHODS: The trial was conducted between October to April in 2013. 22 patients meeting inclusion criteria were enrolled in a double blind randomized clinical trial after clinical and histopathological confirmation oral health center of Mashhad dental university. Patients were randomly divided into two groups. Both groups received the standard treatment of OLP for one month (Dexametazone mouthwash and Nystatin suspension tid). Experimental group received oral Curcumin tablets (500 mg qid) and the control group received placebo tablets. Lesions evaluated every two weeks of treatment for a one-month period. Visual analogue scale (VAS) and Thongprosom scale were orderly used to assess the severity of pain and the severity of lesions before, during and at the end of treatment. All the scores were analyzed with Freidman and Mann-Withniey test and in other criteria we used other analysis such as: Fisher, t-test, etc.

RESULTS: From 22 patients who met the inclusion criteria 2 patients were excluded from our study. 12 patients (60%) were in experimental group that consisted of 10 (83/3%) female and 2 (16/7%) male and 8 patients were in control group consisted of 3 (37/5%) female and 5 (62/5%) men. The average age in experimental group was $49/42 \pm 11/22$ and in control group was $52/75 \pm 9/438$. There were no significant difference between two groups in severity and pain intensity score in both follow ups but a significant reduce in each group, in both follow ups compare with the first visit, was seen. There wasn't any side effect at this dose of curcumin.

CONCLUSION: Curcuminoids at this dose were well tolerated and the results suggest that for future studies a larger sample size, a higher dose of curcuminoids administration should be considered.

KEYWORDS: Curcumin, Lichen planus, Corticosteroids.

Rhinosinusitis and endodontic disease

Sara Askarifard DDS, MSc¹

¹ Assistant Professor, Department of Endodontics, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: askarifard.sara@yahoo.com

Abstract

BACKGROUND AND AIM: The most common nonodontogenic cause of dental pain arises from the maxillary sinusitis. Although dental infection extension causing a secondary maxillary sinus infection. Differential diagnosis of pulpal and sinusitis pain and prevention of unnecessary treatment.



CONCLUSION: Obstruction of sinus opening is commonly causes initiating the events leading to rhinosinusitis. Cause of this obstruction is mucosal inflammatory edema in response to a virus, bacteria or allergen. The referral of pain from the maxillary sinus to the maxillary dentition is due to the close anatomic relationship between the floor of the maxillary sinus and the roots of posterior maxillary teeth. This referral pain causes misleading in diagnosis and treatment of pain. Complete dental and medical history and intra and extra oral examination with para clinical findings can help in rule out diseases. Also maxillary posterior tooth with apical periodontitis and infection extension of these teeth cause localized mucosal thickening in the adjacent sinus mucosa and secondary maxillary sinus infection. In this situation simultaneously treatment is necessary.

KEYWORDS: Endodontic, Sinusitis, Pain.

Anger expression in patients with Oral Lichen Planus

Rana Ataran DDS, MSc¹, Masoumeh Mehdipoor DDS, MSc², Ali Taghavi Zonor DDS, MSc³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran

² Associate Professor, Department of Oral Medicine, School of Dentistry, Ardabil University of Medical Sciences, Ardabil, Iran

³ Associate Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran
Email: rana.ataran@gmail.com

Abstract

BACKGROUND AND AIM: Oral lichen planus is a relatively common inflammatory disease with unknown etiology. Considering the impact of psychosocial stressors on the cellular immune response, the aim of the study was to investigate the expression of anger and the incidence of lichen planus.

METHODS: In this observational study case - control), 95 people in three groups participated: patients with oral lichen planus, positive control (with orofacial pain), negative control (healthy), were evaluated via the Persian version of questionnaire of "state - trait of anger expression (STAXI-2)" completed by the subjects.

RESULTS: With regard to results of One Way ANOVA analyses for positive and negative control groups and lichen planus: the significant differences for physical state of Anger ($P < 0.01$), trait anger trait ($P = 0.04$), inward expression of anger ($P = 0.01$), outward expression of anger ($P = 0.02$) and overall index of anger ($P < 0.01$) were observed. Based on the results of Post Hoc analyses, statistically significant differences were detected in results of overall index of anger between negative and positive control group ($P = 0.01$); and negative control group with lichen planus ($P < 0.01$). Results of Negative and positive control group about outward anger expression ($p = 0.04$), lichen group and negative control about the expression of anger inside ($P = 0.02$) were significantly different too. The Spearman's correlation data on visual analogue scale of pain, based on separated indices of anger in lichen plan group showed significant correlation between reaction trait of anger and the intensity of pain ($P = 0.03$).

CONCLUSION: This study indicated that there is significant correlation between anger control inward and its suppression (gathering tension) and lichen plan development. On the other hand, patients expressed their anger in a non-adaptive and physical manner, and there were a significant relation between reaction anger trait and pain severity.

KEYWORDS: Oral Lichen Planus, Anger, Pain.

Low-level laser therapy: a standard of supportive care for cancer therapy-induced oral mucositis in head and neck cancer patients?

Saranaz Azari Marhabi DDS, MSc¹, Somayeh Alirezai DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Qom University of Medical Sciences, Qom, Iran.

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran
Email: saranazari@yahoo.com

Abstract

BACKGROUND AND AIM: Oral mucositis (OM) is still a common and severe acute side-effect of many oncologic



treatments, especially in patients treated for head and neck cancer. It may affect quality of life, require supportive care and impact treatment planning and its efficacy. Low-level laser therapy (LLLT) seems to promote pain relief and reduces OM incidence and its severity. It has been recommended for these patients as a treatment option but without any consensus in the LLLT procedure. New recommendations and perspectives for clinical trials will be discussed. The efficacy of soft laser in the management of iatrogenic oral mucositis has been evaluated during the last two decades. Its effectiveness and level of recommendation got stronger with time. We will report and discuss some major results and the latest recommendations published on this topic. 11 randomized placebo-controlled trials were selected with a total of 415 patients treated with chemotherapy and/or radiotherapy for head and neck cancer. The relative risk for developing OM was significantly reduced after LLLT but only for a dose between 1 to 6 Joules per point. Pain severity and duration of OM were also reduced without difference with placebo. Nine years after the positive results published for patients treated by radiotherapy, a new French randomized, multicentric, phase III trial for patients treated with new standard treatment, using LLLT in accordance to recent recommendations is ongoing. The very encouraging results of LLLT in the prevention and treatment of OM in patients treated by chemotherapy or radiotherapy for advanced head and neck cancer could soon be proposed as a new standard of care, according to the multinational Association of Supportive care in Cancer (MASCC) criteria. Modern lasers are less time consuming and extraoral applicators for a possible use by trained paramedical staff could be helpful to complete clinician practice. A preventive dose of 2 J/cm² and a curative dose of 4 J/cm² if using a red wavelength lasers are now recommended.

KEYWORDS: Low-level laser therapy, Oral mucositis, Radiation therapy, Chemotherapy.

Laser treatment in oral and maxillofacial hemangioma and vascular tumors

Ehsan Azma DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Guilan University of Medical Sciences, Guilan, Iran
Email: ehsanazma@yahoo.com

Abstract

BACKGROUND AND AIM: Vascular tumors in the facial and oral region are more frequently encountered in youngest and oldest ages. These vascular lesions localized especially on exposed sites affect the physiognomic aspect and may cause significant psychological distress. Capillary malformation, usually referred to as a port-wine stain or nevus flammeus, is the most common type of vascular malformation. Their presence within the mouth is not uncommon and can be associated with bleeding, ulceration, pain, difficulty swallowing, airway obstruction, and facial deformity. In order to treatment of this anomaly and oral manifestations of this disease there are many methods. Injection of sclerosing agents and embolization with solid materials followed by surgical excision are usually used for the treatment of hemangioma and vascular malformations. Cryotherapy was also used in the treatment of these vascular tumors with good results. Although these can occasionally result in significant deformity, prolonged pain, skin necrosis, nerve damage, or systemic toxicity. This has led to the use of various lasers-carbon dioxide, argon or diode- sometimes in combination with radiofrequency current and, more recently, alexandrite or long-pulsed Neodymium: Yttrium- Aluminum-Garnet (Nd: YAG) lasers. The Nd: YAG laser is considered the treatment of choice for this condition. The sequential application of 595-nm PDL followed by 1064-nm Nd: YAG laser is known to be effective in the treatment of some capillary malformations resistant to conventional treatment with PDL. Similarly good outcomes have been reported in the treatment of venous malformations of the thorax, neck, or eyelids. The response develops because the sequential application of the 2 lasers reaches structures at different levels of the dermis: PDL penetrates to approximately 1 mm while Nd: YAG laser generally penetrates to a depth of 5 mm or 6 mm. Initial use of PDL reduces the oxyhemoglobin within the red blood cells to methemoglobin, leading to a 3-to-5 fold increase in the level of Nd: YAG absorption. Nd: YAG fluence can thus be reduced, decreasing the associated pain and edema. The use of laser technology in order to treatment of oral and maxillofacial vascular lesions have several benefits over other treatments modalities such as surgery, sclerosan agents, cryotherapy and have few side effects.

KEYWORDS: Laser, Treatment, Hemangioma, Vascular tumors.



Determination of hepatitis B antibody titers in dental students

Abolfazel Bagheri DDS, MSc¹, Javad Kia DDS, MSc², Ali Seifi DDS³, Nasim Saba MPH⁴

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Ardabil University of Medical Sciences, Ardabil, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Guilan University of Medical Sciences, Guilan, Iran

³ Dentist

⁴ MPH of Chemistry

Email: a.bagheri@arums.ac.ir

Abstract

BACKGROUND AND AIM: Hepatitis B is an important cause of chronic hepatitis and hepatic failure in the world, and about 350 millions are carrier of HBsAg all over the world. We determined hepatitis B antibody titers in dental students.

METHODS: In this descriptive study, result of HBsAb test with ELISA method in dental students that vaccinated against hepatitis B, voluntarily was collected.

RESULTS: In this study, 47 dental students fills questionnaire and gave blood sample voluntarily for HBsAb test. Results divided to 3 group protective (>20), borderline (10-20) and unprotective (<10) based of scientific standards. 39 people were protected, 5 people low protection and 3 people were un protected.

CONCLUSION: Results shows hepatitis B antibody titer in dental students is suitable. By attention to results we propose that dental students perfect our vaccination and determine HBsAb because they are at risk infection contamination.

KEYWORDS: Hepatitis B, Antibody titer, Dental students.

Oal cancer: A Rreview of literatures

Pejman Bakyanian Vaziri DDS, MSc¹, Mostafa Esmali DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Shahed University of Medical Sciences, Tehran, Iran

Email: dr_pvaziri@yahoo.com

Abstract

BACKGROUND AND AIM: Cancer is defined as the uncontrollable growth of cells that invade and cause damage to surrounding tissue. Oral cancer appears as a growth or sore in the mouth that does not go away. Oral cancer is the 8th most common cancer in men and the 15th most common cancer among women. Squamous cell carcinoma is the most common oral cancer. The average age is about 60 years. Most areas of conflict within the mouth are including the tongue, oropharynx, and floor of the mouth. Oral cancer normally dosenot have any clinical appearance inside the oral cavity. The fast diagnosis of oral cancer is very important and almost. The actual curative treatment modalities are usually chemotherapy with concurrent radiation, sometimes combined with surgery.

KEYWORDS: Oral cancer, Squamous cell carcinoma, Treatment.

Artificial network application in diagnosis of oral diseases

Maryam Basirat DDS, MSc¹, Mohhamad Taghi Maghsoudi DDS²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Guilan University of Medical Sciences, Guilan, Iran

² Dentist, Guilan, Iran

Email: mbasirat2010@gmail.com

Abstract

BACKGROUND AND AIM: Variable types of artificial system have been studied to help in correct diagnosis of diseases in



medical and dental field. Variables such as history, demographic features, clinical finding, laboratory finding, radiographic features, photographic pictures, histopathologic finding has been investigated and analyzed. Number of these studies are low in dentistry field. Artificial system were used to differentiate between leukoplakia and likenoid reaction, differentiate between leukoplakia and oral scc, early diagnosing of pathologic sign around dental and maxillofacial implants and patients usually are referring to general medical and dental practitioners for diagnosis and treatment of diseases. In some studies, is noticed that diagnostic accuracy of dental practitioners is low. Artificial system can help these practitioners in diagnosis of oral disease if it was accurate. In this review study artificial network' application was investigated in oral lesion diagnosis.

CONCLUSION: Artificial network can not be replaced by expert specialist but it can be used to diagnosis and treatment of oral disease as and hopeful equipment. Of course is needed to study more in this field, apply complete data base in oral disease and more training of artificial networks.

KEYWORDS: Artificial network, Application, Diagnosis, Oral diseases.

Maxillary metastasis of a Medullary Thyroid Carcinoma in a 21 year old: The first reported case in Iran

Samira Basir Shabestari DDS, MSc¹, Farzaneh Agha Hosseini DDS, MSc², Iman Shirinbak DDS, MSc³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Zanjan University of Medical Sciences, Zanjan, Iran

² Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

³ Assistant Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Zanjan University of Medical Sciences, Zanjan, Iran

Email: samira_bsh2@yahoo.com

Abstract

BACKGROUND AND AIM: Metastasis to oral cavity is a rare phenomenon and represents approximately 1% of all oral malignant tumors. Tumor metastasis to the jaws most often occurs in the seventh decade. It has tendency to the posterior of the mandible. Originally, the term Medullary Thyroid Carcinoma (MTC) is defined as a type of thyroid gland malignancies composed of parafollicular cells. This type of malignancy tends to behave aggressively and often associated with distant metastases including lung, liver and adrenal glands. The aim of this article is to report a case of medullary thyroid carcinoma metastasis to the anterior maxilla in a 21-year old woman after a seven-year interval.

KEYWORDS: Maxilla, Medullary Thyroid Carcinoma, Metastatic tumor.

Facial pain as the first and only symptom of coronary artery disease: A case report

*Mohsen Dalband DDS, MSc¹, Hamed Mortazavi DDS, MSc², Hadi Hashem-Zehi DDS, MSc³,
Maryam Baharvand DDS, MSc²*

¹ Assistant Professor, Department of Oral and Maxillofacial Surgery, School of Dentistry, Hamedan University of Medical Sciences, Hamedan, Iran

² Associate Professor, Department of Oral Medicine, School of Dentistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran

³ Assistant Professor, Department of Oral and Maxillofacial Surgery, School of Dentistry, Zahedan University of Medical Sciences, Zahedan, Iran

Email: hamedmortazavi2013@gmail.com

Abstract

BACKGROUND AND AIM: Pain of ischemic and non-ischemic cardiac disease can be referred to the craniofacial region. In 6% of patients, craniofacial pain can be the first and only symptom of cardiac ischemia. Missed diagnoses of these cases may lead to unnecessary dental treatment and a significant number of deaths in patients with atypical symptoms of coronary disease. We present a 48-year-old man with a chief complaint of severe bilateral pain in the temporomandibular joint referred for evaluation of a suspected temporomandibular disorder. In clinical and radiological examinations we did not find any origin for his pain. The patient was referred for cardiological evaluation (exercise test, electrocardiography,



laboratory tests and coronary angiography), and was diagnosed as angina pectoris. The patient had no previous history of heart disease or chest pain. Awareness of this symptomatology can be useful for diagnosis of coronary insufficiency and timely treatment. Therefore, cardiac disease should be considered in the differential diagnosis of orofacial pain.

KEYWORDS: Facial pain, Coronary artery disease, Temporomandibular disorder.

Adenoid cystic carcinoma in minor salivary glands of buccal mucosa: challenge in diagnosis

Zohreh Dalirsani DDS, MSc¹, Atessa Pakfetrat DDS, MSc¹, Ameneh Rahimi DDS²

¹ Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Postgraduate Student, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: dalirsaniz@mums.ac.ir

Abstract

BACKGROUND AND AIM: Some patients referred to dental clinic for tumoral lesions that sometimes they are misdiagnosed as oral or dental infection. Minor salivary gland tumors may grow without any symptoms that leads to delay diagnosis. A 48-years-old man referred to oral medicine department with complaining from cheek swelling from three years ago. He noticed a significant enlargement from 5 months ago. In extra-oral examination, there was facial asymmetry associated with a mass with defined border in cheek. In intraoral examination, a mild tender mass with firm consistency in masseter muscle was palpable. He did not have any palpable lymphadenopathy. Sonography revealed an infiltrative mass in right cheek that caused maxillary bone destruction. A diagnosis of mesenchymal or salivary gland tumor was considered. After incisional biopsy, histopathological evaluation showed adenoid cystic carcinoma and the patient was referred for excisional surgery. Adenoid cystic carcinoma is a malignant salivary gland tumor. In parotid gland, it induces a pain if invades to facial nerve, but in minor salivary glands it sometimes has a slow growing without any symptoms that leads to late referral and diagnosis.

KEYWORDS: Adenoid cystic carcinoma, Minor salivary glands, Diagnosis.

Tripe A syndrome (Allgrove syndrome) and its oral manifestations

Mehdi Davarmanesh DDS, MSc¹, Maryam Zahed DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Ardabil University of Medical Sciences, Ardabil, Iran
Email: maryamzhd@yahoo.com

Abstract

BACKGROUND AND AIM: Triple A syndrome is a rare autosomal recessive disorder. The major manifestations of the involved patients are adrenal insufficiency, achalasia and alacrimia. In recent years orofacial features of the patients with this syndrome have been reported including long narrow faces, high arched palate, oral pigmentation and fissured or atrophic tongue. Xerostomia is also recognized as a consistent oral finding in the patients. Xerostomia and pigmentations of the oral mucosa have long been recognized as separate oral abnormal conditions with many different etiologies. In Triple A (Allgrove) syndrome, these two can potentially coexist as a result of the pathophysiology of the disorder. Aside from challenges in the management of xerostomia and its complications, the association of these conditions in same patients especially in childhood would be of great clinical importance in approach to diagnosis of a hereditary syndrome which encompasses noticeable systemic features. Here we report two siblings having the syndrome with some discussions on the significant intraoral findings and their differential diagnoses.

KEYWORDS: Tripe A syndrome, Allgrove syndrome, Oral Manifestations.



The reality of NICO (Neuralgia inducing- cavitational osteonecrosis)

Hooman Ebrahimi DDS, MSc¹, Sara Pourshahidi DDS, MSc², Farhad Assarzadegan MD³

¹ Assistant Professor , Specialist-Fellowship in Orofacial Pain, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

³ Assistant Professor, Department of Neurology, School of Medicine, Shahid Beheshty University of Medical Sciences, Tehran, Iran
Email: hooman.ebrahimi@yahoo.com

Abstract

BACKGROUND AND AIM: The clinicians working of the diagnosis and management of orofacial pain do not have a general agreement on NICO. Since late 1970s that NICO had been demonstrated, there are attempts on defining its clinical, radiographic, histopathology and neurologic feature, but specialists in pain do not agree on the results. Patients often can not localize or describe the pain. Most of them feel pressure and deep burning at the site. The pain often initiates as dull pain and during months or years increase in frequency and intensity. Rathne et al demonstrate NICO as tenderness in an edentulous area with no radiographic finding and a rapid decrease in pain after a diagnostic local anesthesia. There are no radiographic criteria for the disorder. Reviewing articles in “Med Line”, “Pub Med”, ”Scopus” and reference books from 2000 to 2014. It seems that supporting data of NICO is not sufficient and this leads to omitting NICO from some reference books in pain management and dentistry.

KEYWORDS: NICO, Neuralgia inducing- cavitational osteonecrosis, Painful socket, Diagnostic topical anesthesia.

Diagnosis and treatment of temporomandibular disorders: A review of literatures

Sayedeh Fariba Emadian DDS, MSc¹, Mohsen Naseri PhD²

¹ Assistant Professor, Department of Prosthodontics, School of Dentistry, Birjand University of Medical Sciences, Birjand, Iran

² Assistant Professor, Department of Molecular Medicine, School of Medicine, Birjand University of Medical Sciences, Birjand, Iran
Email: dr.f.emadian@gmail.com

Abstract

BACKGROUND AND AIM: Temporomandibular disorder (TMD) has multiple clinical manifestations involving dysfunctions and pain in the masticatory muscles, temporomandibular joints (TMJs), and associated structures, and affects a considerable number of adults. The aim of this investigation is evaluation of diagnosis and treatment of temporomandibular disorders. The literature was searched using Medline, Pubmed and Elsevier Science Direct from 1990 to 2014. Studies had to be intervention studies for temporomandibular disorders. Symptoms of TMD include chewing difficulty, Clicking or another sound when opening or closing, aching pain in the face, earache, headache and jaw pain or tenderness. Treatment of TMD depends on the severity and source of disease. These are occlusal or stabilization splints, pharmacotherapy, physical therapy, intra-articular injection, arthrocentesis/arthroscopy, arthroplasty and total joint replacement. Improved education of temporomandibular disorders sign and symptoms will leads to accurate diagnosis and treatment planning. For dental profession these educations are critical to avoid unnecessary modalities.

KEYWORDS: Temporomandibular disorders, Diagnosis, Treatment.



Dentin Hypersensitivity :Etiology, Diagnosis & treatment

Samaneh Eslami DDS, MSc¹

¹ Assistant Professor, Department of Restorative Dentistry, School of Dentistry, Birjand University of Medical Sciences, Birjand, Iran
Email: samaneheslami51@gmail.com

Abstract

BACKGROUND AND AIM: Dentin hypersensitivity has been referred to as a painful condition that is characterized by sharp pain arising from exposed dentine in response to stimuli typically thermal, tactile, osmotic or chemical. The prevalence of dentin hypersensitivity among adults is %8 to %57 & a higher prevalence in periodontal patients, as a high prevalence condition, many theories has been used to explain the mechanisms of DH. Although there are a large number of techniques for treatment of this condition, dentists are confused about etiology & diagnosis of DH. The aim of this review article is to provide a general overview about the etiology, characteristics & management of DH. Dentin hypersensitivity as a chronic disease is increasingly prevalent among adults. For that, it is strongly recommended to screen routinely all dentate patients for DHS. This article tries to increase the knowledge of dentists in the field of dentistry regarding the dentin hypersensitivity & presented the newest trend on the etiology, methods of diagnosis & management strategies of the disease.

KEYWORDS: Dentin hypersensitivity, Desensitizing agents, Dentin/etiology sensitivity, Dentin/therapy sensitivity.

Traumatic dislocated mandibular condyles: A challenging subject in the treatment facial fractures: Review of literature and report of 2 cases

Javad Faryabi DDS, MSc¹, Amir Hosien Babaiee Soroor DDS²

¹ Associate Professor, Member of Oral and Dental Disease Research Center, Department of Oral and Maxillofacial Surgery, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Postgraduate Student, Department of Oral and Maxillofacial Surgery, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: jfomfs@gmail.com

Abstract

BACKGROUND AND AIM: Mandibular dislocation is defined as a non reducing displacement of mandibular condyle in front of and superior to the articular eminence unilaterally or bilaterally, resulting in the inability to close the mouth. In long standing condylar dislocation, with passage of time additional muscle spasm and fibrotic changes occur in the ligaments and muscles increasing the severity of the problem, and the reducing the condyles will be more difficult. So, manual reduction should be attempted first under local or general anesthesia, then if not successful then surgical reduction may attempted under general anesthesia. So in respect of problematic treatment of these patients and for introducing to different subjects of these treatments in this review article we will introduce to 2 case reports of this type of mandibular dislocation. By exact surveying these patients from clinical and radiographic standpoint, first of all we try to reduce the dislocated condyles manually, that is very difficult to reduce them and they are unsuccessful in respect to passing the time. So they need to condylectomy, coronoidectomy, acquiring and maintaining the ideal occlusion, limited time of IMF, performing physiotherapy accompanied by maintaining the current occlusion. So with exact follow up of these patients and periodic regular examination, we can overcome on several problems of these patients, and finally return the expected function included acceptable range of motion of condyles and acceptable occlusion to the patient.

KEYWORDS: Ultrasonography, Temporomandibular joint disorders, Mandibular condyles, Facial fractures.



Comparative Evaluation of the Presence of SMA, Anti-ds DNA and ANA antibodies, and, rheumatoid factor in the Oral Lichen Planus, Oral Lichenoid Drug and Oral Lichenoid Contact Reactions

Parichehr Ghalyani DDS, MSc¹, Alireza Geranmayeh DDS², Mohammad Akhoondzadeh DDS, MSc³

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran
² Dentist

³ Assistant Professor, Department of Oral Medicine, School of Dentistry, Bushehr University of Medical Sciences, Bushehr, Iran
Email: dr.akhoondzadeh@gmail.com

Abstract

BACKGROUND AND AIM: Oral lichenoid reactions (OLR) are disorders which have different etiology and cannot be distinguished from oral lichen planus (OLP) by their clinical or histopathological features. In recent years both disorders have been considered T-cell mediated inflammatory diseases. The aim of this study was to attain more information regarding to clearly to distinguishing of these two lesions.

METHODS: In this descriptive-analytical study, blood samples were taken from 80 patients (59 females and 29 males) and sent to the laboratory for histopathological diagnosis based on WHO criteria. After separating the blood sera of the samples, the sera were evaluated by ELISA for the presence of antinuclear antibodies (ANA), Anti-ds (double stranded) DNA antibodies, rheumatoid factor (RF), and smooth muscle antibodies (SMA). Data was analyzed with SPSS using the chi-squared test and t-test ($\alpha = 0.05$).

RESULTS: The mean ages were 48.62 and 49.38 for OLP and OLR patients, respectively. There were no significant differences in ANA and RF blood levels (p value > 0.05). Anti-ds DNA and SMA antibodies were not detected in the blood samples. No significant differences were noted in the blood levels of these antibodies (p value < 0.05).

CONCLUSION: According to the results of the present study, no significant differences were observed between the OLP and OLR patients in relation to the presence or absence of ANA, anti-ds DNA and SMA antibodies and RF in the blood samples.

KEYWORDS: Oral lichen planus, Oral lichenoid reaction, Auto-antibodies, Autoimmune disease.

Acomparison of therapeutic effect of two different medical treatments, in the treatment of trigeminal neuralgia

Neda Gholami DDS, MSc¹, Hakimeh Ahadian DDS, MSc², Mohammad Hossein Akhavan Karbasi DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Zanjan University of Medical Sciences, Zanjan, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Shahid Sadoughi University of Medical Science, Yazd, Iran
Email: dr.gholami.n@zums.ac.ir

Abstract

BACKGROUND AND AIM: Trigeminal neuralgia, also named Tic Doulereux, is the most common type of neuralgias. Carbamazepine introduced as the first line therapy in trigeminal neuralgia but regarding to the side effects and gradual decline in its effect in some patients, we decided to compare the therapeutic effect of carbamazepine in relieving pain of trigeminal neuralgia with combination therapy of gabapentin and baclofen and introduce an effective alternative in necessary cases.

METHODS: Forty patients with trigeminal neuralgia that referred to Oral and Maxillofacial Medicine department of Yazd dental school were selected and randomly divided to group A (200 mg carbamazepine three times daily) and B (100 mg gabapentin and 10 mg baclofen three times daily). Their pain intensity was evaluated according to the Visual Analog Scale (VAS). The Hospital Anxiety and Depression Scale was used for evaluating the psychiatric state of patients. Patient were recalled 1 week, 3 week, 2 month, 3 month and 4 month after the first visit and their pain intensity was recorded according to VAS, in addition to readjusting dosage of medications. A 4 stages functional clinical score was also used in this study for determining the treatment response.



RESULTS: The VAS changes in group A, were significant in first week, second week and second month (Pvalues 0.000, 0.001, 0.004 respectively), but these changes were not significant in third and fourth month. (P values 0.102, 1.000 respectively). In group B VAS values in first and third week, second and third months showed significant changes (Pvalues 0.001, 0.001, 0.003, 0.011 respectively) but this was not significant in fourth month (Pvalue = 1.000). Pain intensity changes according to VAS didn't show significant differences between two groups (Pvalue = 0.052). The statistical analysis for determining the treatment response according to the functional clinical score in groups A and B showed significant change during the time (Pvalue = 0.023).

CONCLUSION: Results of this study showed that both A and B drug groups can cause significant decrease in pain intensity of trigeminal neuralgia. This decrease in group A was significant up to second month and in group B up to third month. This shows the faster effect of carbamazepine in pain intensity decline relative to gabapentin and baclofen. The more and faster effect of carbamazepine in trigeminal neuralgia was similar to many previous studies.

KEYWORDS: Trigeminal neuralgia, Carbamazepine, Gabapentin, Baclofen.

Professional immorality and dentistry

Jahangir Haghani DDS, MSc¹, Molouk Torabi DDS, MSc²

¹ Associate Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Associate Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: j-haghani@kmu.ac.ir

Abstract

BACKGROUND AND AIM: Professional immorality has been discussed throughout the human life. Unfortunately, it may affect both dentists and physicians. The lack of professional ethics has been called "immorality pain".

METHODS: Professional ethics is a branch of philosophy dealing with morality. Historically, transfusion of infected blood to prisoners and captured soldiers, exposing prisoners to anopheles mosquito; killing of identical twins and abortion has been reported in ancient texts. If legal rules establish in dentistry society and the professionals obey the rules, immorality will be eradicated.

RESULTS: Respect patient privacy, maintaining patient confidences, keeping promises, being truthful, and considering patient values and personal preferences in treatment decisions are some samples of ethics in dentistry.

CONCLUSION: The goals of ethics education are creating an awareness of ethical dilemmas and creating a positive attitude that produces a motivational stimulus, a procedure that may lead to immorality eradication.

KEYWORDS: Ethics, Law, Dentistry.

Comparative evaluation of gene expression of RANKL/OPG and histological changes in dental socket of rat after administration of diclofenac and celecoxib

Samira Hajisadeghi DDC, MSc¹, Mina Hamian DDC, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Qom University of Medical Sciences, Qom, Iran
Email: hajisadeghi@dnt.mui.ac.ir

Abstract

BACKGROUND AND AIM: In the orthopedic area that prolonged use of NSAIDs can hinder long bone fracture healing and new bone formation. The purpose of the present study was to investigate if short time administrations of diclofenac or celecoxib



interfere with the osseous wound healing and the RANKL/OPG balance during the healing of the alveolar process.

METHODS: Fortyfive Wistar rats were used. After extraction of the right maxillary first molar, 15 rats received 5 mg/kg/day of diclofenac, 15 rats received 15 mg/kg/day of celecoxib and 15 rats received normal saline. The animals were sacrificed 7, 14 and 21 days after tooth extraction. New bone formations, number of osteoclasts and osteoclasts, OPG /RANKL mRNA expression were determined. The data were analyzed by one-way ANOVA.

RESULTS: The ratio of RANKL/OPG in the control group was higher than diclofenac and celecoxib groups. TRAP immunolabelling of the control group was more than diclofenac group on day 7 and was more than celecoxib group on day 14. On day 21, no significant differences were noted among the three studied groups. On days 7; the osteoblast number in the control group was higher than diclofenac and celecoxib groups. On day 14 and 21, the new bone formation in treated rats was not significantly different from that in control rats.

CONCLUSION: Although Short-term treatments with diclofenac or celecoxib interfere with RANKL/OPG ratio; do not greatly interfere with alveolar bone healing during the experimental period of 21 days in rats.

KEYWORDS: Alveolar healing, NSAIDs, Osteoclastogenesis.

Evaluation of relationship between tension headache and anxiety and depression

Peyman Hashemian MD¹, Sayed Alireza Sajadi MD¹

¹ Assistant Professor, Department of Psychiatry, Psychiatry and Behavioral Sciences Research Center, Ibn-e-Sina Hospital, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
Email: hashemianp@mums.ac.ir

Abstract

BACKGROUND AND AIM: The relationship between anxiety and depression with tension headaches, is one of the most important debates in the recognition and treatment of tension headach.

METHODS: In this study the relationship between the tension headache with signs and symptoms of anxiety and depression and both of them were evaluated. In this study all patients during one year who came to medical centers of Ilam that had tension headache in interview were evaluated. Tension headaches were diagnosed by a psychiatrist in structure interview about half an hour in each patient that would be 1087 patient. Results were compared with SPSS software and descriptive tests.

RESULTS: In this study of 1087 patients who came to Ilam medical centers for treating tension headaches that 423 patients (40%) only had a tension headache, and had no symptoms of anxiety and depression and other psychiatric symptoms, while the remaining 664 patients who were suffering anxiety or depression or both symptoms. Anxiety was in 559 patients (51%) and 78 patients had depression (7%) and 27 patients (2%) were diagnosed with anxiety and depression together.

CONCLUSION: This study showed that 60 percent of those who had tension headache were not aware of own anxiety and depression symptoms.

KEYWORDS: Relationship, Tension headache, Anxiety, Depression.

Evaluation of the effect of two systemic doses of Hesa-A on prevention of induced tongue neoplasm in rats

Sanaz Helli DDS, MSc¹, Masoumeh Mehdipour DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Ardabil University of Medical Sciences, Ardabil, Iran
² Associate Professor, Department of Oral Medicine, School of Dentistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran
Email: dr.s.helli@gmail.com

Abstract

BACKGROUND AND AIM: The aim of the present study was to investigate and compare the inhibitory effects of two systemic doses of Hesa-A on prevention of 4NQO-induced tongue neoplasms in rats.



METHODS: 48 male Sprague Dawley rats were divided into four groups of A, B, C and D of each 12 rats. The rats in groups B to D received 30 ppm of 4-NQO in drinking water for 12 weeks. When feeding with 4-NQO was initiated the rats in groups B and C received Hesa-A at doses of 250 and 500 mg/kg, respectively, 3 times a week. Body weights were measured three times a week. At the end of the experiment, the rats were euthanized and the tongue was removed. Histological evaluations (H & E) for carcinogenesis were carried out under a light microscope.

RESULTS: This study had two main aims: weight changes and histopathologic changes. The mean body weights of rats in groups B, C and D were significantly lower than that in group A ($P < 0.05$). There were no significant differences in weight changes between groups B, C and D. In the present study, after 12 weeks of treatment, Tongue specimens in groups B and C did not exhibit severe dysplastic changes; however, concurrent hyperplasia, without atypia, and mild-to-moderate dysplastic changes were detected. These changes were significantly less than those in group D and groups A, B and C ($P < 0.001$, $P < 0.01$ and $P < 0.05$), respectively.

CONCLUSION: Hesa-A has dose-dependent inhibitory effects on the development of neoplasms of the tongue.

KEYWORDS: Hesa-A, 4NQO, Tongue neoplasm, Rat.

Introducing "Atypical sensory disorder"

Abbas Javadzade Bluori DDS, MSc¹, Pegah Mosannen Mozafari DDS, MSc²

¹ Associate Professor, Department of Oral Medicine, Head of Oral and Maxillofacial Pain Clinic, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Assistant Professor, Department of Oral Medicine, Oral and Maxillofacial Pain Clinic, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: blouria@mums.ac.ir

Abstract

BACKGROUND AND AIM: Role of sole and mind in pain perception is well documented –in term of diagnostic terms such as atypical facial pain ,atypical odontalgia, burning mouth or tongue syndrome- but sometimes other sensations in oromaxillofacial region can arise due to a psychological origin. Here we introduce a new subgroup of oral and maxillofacial sensory disorders. Introducing new subgroup: Although sensations such as anesthesia, numbing, tingling, pruritus, xerostomia, sialorea, foreign body (sand, moving worm) in saliva, halitosis, Dysgeusia, bad taste, bitter taste, loss of sweet taste perception, can have an organic origin but in many situations these complaints have a subjective origin and are related to mental and psychological engagement. These have not any discoverable physical explain and are exacerbated with intensified underling -even unknown- psychological disorder. Hence finding this relation is a challenging and difficult. It seems that a new category must be considered in evaluating orofacial sensory disorders named atypical sensory disorder. The criteria of inclusion in this subgroup is loss of any physical explain and presence of an underlying psychological disorders which it's intensity is correlated with intensity of sensory compliant. Awareness of this relation can lead to prompt treatment, patient relief and avoidance of excessive financial and spiritual costs.

KEYWORDS: Sensory disorder, Orofacial pain, Psychological disorder.

The prognostic comparison of Bisphosphonate osteonecrosis with osteoradionecrosis

Leila Joker DDS, MSc¹, Hamid Hamidi DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Arak University of Medical Sciences, Arak, Iran

² Assistant Professor, Department of Dermatology, School of Medicine, Arak University of Medical Sciences, Arak, Iran
Email: leilajokae2004@yahoo.com

Abstract

BACKGROUND AND AIM: Perhaps one of the most serious complication of radiotherapy and Bisphosphonat treatment is



osteonecrosis or bone death which can occur simultaneously or as result of trauma (tooth extract)(1). Bisphosphonats are being used extensively for treatment of osteoporosis and metabolic bone disorders(2).they are also an essential treatment in metastatic bone cancers(3).These patients come to their dentists after Bisphosphonat therapy and some of their teeth are not treatable so we decide to compare them to give our coworkers over view to treatment them. In osteoradionecrosis both soft and hard tissue are injured and this effect is not reduced with passing of time but not all the skeletal bone is affected and with separation of sequester we can reach the live bone while in Bisphosphonate osteonecrosis just the hard tissue is affected and the soft tissue is intact and although the Bisphosphonate is deposited in all skeletal bones but the rate of deposition is greater in those bones with higher turn over and also with time the effect of this drug is reduced and in the presence of normal soft tissue we can expect the coverage of exposed bone with reepithelialization.

KEYWORDS: Bisphosphonate, Osteonecrosis, Osteoradionecrosis.

Celecoxib and oral cancer: prevention and treatment

Nazanin Kamyab DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Rafsanjan University of Medical Sciences, Rafsanjan, Iran
Email: n.kamyab83@yahoo.com

Abstract

BACKGROUND AND AIM: Cyclooxygenase has two isomer: Cyclooxygenase 1 and 2 (cox₁, Cox₂). Epithelial cell product cox₂ (as an enzyme) that result in to production of prostaglandin in response to inflammation, carcinogenesis, proliferation, and differentiation of cells, apoptosis, angiogenesis, and metastasis. Cox₂ Over expression is seen in premalignant and malignant lesion of oral cavity. Celecoxib is a cox₂ inhibitor and can induce apoptosis in cells, recently Celecoxib use for cure or prevention of cancers. We search in pubmed, scopous, google schollor, sid.ir, mgiran.com and iranmedex with these KEY WORDS: Celecoxib, oral cancer, prevention and treatment. We found 16 article from 2002 to 2010. Celecoxib as a cox₂ inhibitor was used in topical and systemic form for prevention of oral cancer in invitro and in vivo studies .It can prevent of oral cancer with several mechanism including delay in cell growth, suppress of metastasis and angiogenesis. In all studies in spite different mechanism (Cyclooxygenase and non Cyclooxygenase pathways) Celecoxib was effective.

KEYWORDS: Celecoxib, Oral cancer, Prevention, Treatment.

Comparative evaluation of low-level laser and systemic steroid therapy in adjuvant-enhanced arthritis of rat temporomandibular joint: A histological study

Faezeh Khozeimeh DDS, MSc¹, Ahmad Moghareabed DDS, MSc², Maryam Allameh DDS, MSc¹, Shahrzad Baradaran MD³

¹ Assistant Professor, Torabinejad Dental Research Center, Department of Oral Medicine, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

² Assistant Professor, Torabinejad Dental Research Center, Department of Periodontology, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

³ Assistant Professor of Pathology, Baradaran Medical Laboratory, Isfahan, Iran
Email: khozeimeh@mui.ac.ir

Abstract

BACKGROUND AND AIM: Low-level laser therapy (LLLT) has shown a promising effect in ameliorating symptoms of rheumatoid arthritis (RA). The aim of this investigation was to compare the early and late antiinflammatory effects of LLLT and betamethasone in RA.

METHODS: In this animal experimental study, after inducing a model of RA in temporomandibular joint (TMJ) of 37 Wistar rats using adjuvant injection, they were randomly distributed into three experimental groups of 12 animals each:



(1) LLLT group; (2) steroid group which received a single dose of betamethasone systemically; and (3) positive control group, which did not receive any treatment. One rat served as the negative control. Half of the animals in all the experimental groups were sacrificed on the 21th day after RA induction (early phase), and the other half were sacrificed 2 weeks later (late phase). Then the severity of TMJ inflammation was assessed histologically in each group on a semi-quantitative scale. Kruskal–Wallis and Mann–Whitney tests were used to compare differences ($\alpha = 0.05$).

RESULTS: The LLLT and steroid groups showed significantly ($P < 0.05$) lower inflammation mean scores in both early (5.66 [± 1.86] and 1.66 [± 1.21], respectively) and late phases of evaluation (1.16 [± 1.47] and 6.50 [± 1.04], respectively) compared to positive control group in early and late stages of assessment (11.66 [± 3.50] and 8.66 [± 1.36], respectively). However, the best results ($P < 0.005$) were achieved in early phase of the steroid group as well as late phase of the LLLT group.

CONCLUSION: It was concluded that LLLT method has a long-term promising effect on reducing inflammation severity of TMJ similar to betamethasone in earlier stages.

KEYWORDS: Arthritis, Betamethasone, Low-level laser therapy, Temporomandibular joint.

Cryotherapy

Fatemeh Lavaii Mashhadi DDS, MSc¹, Khadijeh Hajian DDS²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

² Postgraduate Student, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran
Email: khadijeh.hajian@gmail.com

Abstract

BACKGROUND AND AIM: Cryotherapy is the local or general use of low temperatures in medical therapy. Direct effects of cryotherapy include: ice crystal formation or cellular disruption, cellular dehydration and electrolyte disruption, thermal shock, inhibition of enzyme, protein changes and the effects of thawing. Vascular and immunologic effects are indirect effects of cryotherapy. In dentistry, liquid nitrogen spray or cryo probe was used in various type of lesions such as leukoplakia, inflammatory papillary hyperplasia, lichen planus, mucocel, mucositis and physiologic pigmentation. In mucositis patients kept ice pieces in their mouth but in other lesions have been used cryoprobe or cotton swab and liquid nitrogen and freezing and thawing time have been depended on the size of lesions. Advantages of cryotherapy are minimal general disturbances, low complication rate, safe and easy to perform and inexpensive. Problem and limitations are difficulty in judging the extent of cryolesion can lead to involvement of an inadequate amount of tissue, sometimes need repeat or alternative methods, healing of wounds occur slowly cryosurgery of tongue produce swelling.

KEYWORDS: Cryotherapy, Leukoplakia, Lichen planus, Mucocel.

Squamous cell carcinoma and its relationship with cytokines in saliva

Foruz Keshani DDS, MSc¹, Zeinab Heidaripoor², Fereshteh Aslanbeigi²

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran

² Dental Student, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran

Correspondence to: Foruz Keshani DDS, MSc

Email: kforuz@yahoo.com

Abstract

BACKGROUND AND AIM: Masses or tumors of the oral cavity like other areas of the body are benign or malignant. In oral cavity eighty-five to ninety-five percent of all cancers are related to malignant squamous cell or



squamous cell carcinoma (SCC) that is a very dangerous and fatal. In other words, the most common Cancer of the head and neck area is oral squamous cell carcinoma (OSCC). The five-year survival rate for this cancer is less than the 5% of remaining. Therefore, new methods for early detection is essential. Saliva analysis in the diagnosis of some systemic diseases can help. This review article attempts to determine the relationship between saliva as a diagnostic maker and squamous cell carcinoma. Some studies have suggested that this cancer cells produce cytokines that increase in saliva. This review article by reviewing several studies have tried to introduce number of cytokines in saliva of patients with oral cancer.

KEYWORDS: Squamous cell carcinoma, Salivary cytokines.

Effect of Doxepin mucoadhesive gel on oral mucositis

Ehsan Mohajeri PhD¹, Abbas Pardakhty PhD², Reza Dehghan PhD², Amir Talachi³

¹ Assistant Professor, Department of Pharmaceutics, School of Pharmacy, Kerman University of Medical Sciences, Kerman, Iran

² Professor, Department of Pharmaceutics, School of Pharmacy, Kerman University of Medical Sciences, Kerman, Iran

³ Chemist, Kerman University of Medical Sciences, Kerman, Iran

Email: ehsandaru@gmail.com

Abstract

BACKGROUND AND AIM: Oral ulcerative mucositis induced by chemotherapy or radiotherapy has an impact on quality of life, is dose limiting for chemotherapy, and causes considerable morbidity. The aim of this study was to evaluate the effect of Doxepin on 5-fluorouracil (5FU) induced experimental oral mucositis in hamsters.

METHODS: The mucoadhesive gel formulation was prepared with different concentration of doxepin. Physiochemical properties were evaluated and the best formulation was selected. Oral mucositis was induced in hamsters through a combination of 5-FU treatment and mild abrasion of the cheek pouch. Doxepin was contained in Poloxamer gel formulation. The films were attached to the oral mucosa, and then the healing process was examined by measuring the area of mucositis, Myeloperoxidase (MPO) activity and macroscopic and Histopathological analysis.

RESULTS: The basic properties such as release, stability, uniformity, rheology, and compatibility were in acceptable range. The gel formulation without drug had no effect on 5-FU induced oral mucositis in comparison to the control group. However, formulation (1 to 5%) dose dependently improved recovery from 5-FU-induced damage, and there were significant differences between doses of 2.5 and 5%. Treatment with 5% gel reduced the 5-FU-induced inflammatory cell infiltration in comparison to placebo.

CONCLUSION: These results suggest that topical application of gel containing doxepin has a healing effect on severe oral mucositis induced by chemotherapy.

KEYWORDS: Oral mucositis, Doxepin, Mucoadhesive.

Systematic review and Meta analysis of predictive value of epicutaneous patch testing in patients with oral lichenoid lesions

Hedayat Mohammadi DDS, MSc¹, Zahra Ataie DDS, MSc², Nader Navabi DDS, MSc³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Kordestan University of Medical Sciences, Kordestan, Iran

² Associate Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: hedadent@gmail.com

Abstract

BACKGROUND AND AIM: The aim of this study was to systematically review the predictive value of patch tests in



Iranian Association of Oral Medicine 2014 Meeting and First National Congress on Orofacial Pain Kerman, Iran

15-17 October 2014



patients with oral lichenoid lesions using meta analysis method. After determining the research questions, different data banks such as PubMed, the Cochrane library, and Scopus were searched from 1990 to the end of 2011 by using specific key words. At the end of these steps there were 24 articles which their data extracted. Retrospective studies excluded from the meta analysis.

METHODS: Meta analysis performed on studies in which the patients with oral lichenoid lesions adjacent to amalgam fillings were patch tested which divided to positive and negative based on the reaction to the test.

RESULTS: Finally the index of odd ratio meta analyzed by Stata software program. The meta analysis showed that the chance of recovery of amalgam replacement in positive patch test patients is significantly higher than patients with negative patch tests ($P < 0.05$).

CONCLUSION: Patch test has a predictive value in selecting restorative dental materials.

KEYWORDS: Amalgam filling, Lichenoid lesions, Oral, Meta analysis, Patch test, Systematic.

Modern diagnostic methods in oral pathology

Nooshin Mohtasham DDS, MSc¹

¹ Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: mohtashamn@mums.ac.ir

Abstract

BACKGROUND AND AIM: Molecular pathology methods: polymerase chain reaction, Insitu hybridization, Immunoflorescences are manipulated for diagnosis purposes and researches, for example differential diagnosis of muco-cutaneous diseases: lupus erythematosus, recurrent aphthous stomatitis, sarcoidosis, epithelial and soft tissue tumors and infections. These tools provide for exact classification of tumors and their histogenesis and genetic abnormalities. Molecular method advantages in pathology provide the vaccination and antibody therapies for prevention and cancer therapy, animal studies and invitro researches. Genetic and molecular tools are novel methods and researches in head and neck lesions region with these methods are limited.

KEYWORDS: Diagnostic, Oral pathology, Polymerase chain reaction.

Comparison of antifungal effects of an experimental fluconazole mouthwash and nystatine mouthwash: An in vitro study

Ehsan Momeni DDS, MSc¹, Nader Navabi DDS, MSc², Amin Ayatollahi PhD³, Payam Khazaeli PhD⁴, Abbas Pardakhty PhD⁴

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Arak University of Medical Sciences, Arak, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

³ Associate Professor, Department of Mycology, School of Medicine, Kerman University of Medical Sciences, Kerman, Iran.

⁴ Professor, Department of Pharmaceutics, School of Pharmacy, Kerman University of Medical Sciences, Kerman, Iran

Email: momeni6384@gmail.com

Abstract

BACKGROUND AND AIM: Treatment of oral candidiasis with mouthwashes has several advantages. The aim of the present study was to evaluate the clinical efficacy of a new fluconazole suspension on the *Candida albicans* and compare its effects with those of nystatin.

METHODS: In the present in vitro study 10-mg/mL fluconazole mouthwash was formulated in an aqueous suspension. Brookfield viscometer was used to determine particle size and shape for the suspension formulation prepared and the dissolution process of foreign suspension was evaluated. Nystatin suspension (100,000 U/mL) available on the market was used in this study. PTCC5027 standard strains of *Candida albicans* were provided by the Iranian Collection Center



for Infectious Bacteria and Fungi. Clinical samples of *Candida albicans* were exposed to fluconazole and nystatin suspensions by flow cytometry and macrodilution methods. Experimental results were recorded and analyzed by descriptive-observational method. MICs for both fluconazole and nystatin suspensions were measured.

RESULTS: The results showed that 10-mg/mL nystatin and fluconazole suspensions are able to eliminate *Candida albicans*. MICs for fluconazole and nystatin suspensions were and respectively.

CONCLUSION: Both fluconazole and nystatin suspensions were able to eliminate *Candida albicans* at a concentration of 10-mg/mL but the results of MIC showed that nystatin had a more potent effect at lower concentrations compared to fluconazole and fluconazole had no particular superiority over nystatin in this respect.

KEYWORDS: *Candida albicans*, Fluconazole, Nystatin, Suspensions.

Botulinum in Head and Neck Pains: Advantages and Limitations

Mahdieh-Sadat Moosavi DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran
Email: m-moosavi@razi.tums.ac.ir

Abstract

BACKGROUND AND AIM: Many specialties are usually confronted with the challenge of diagnosing and treating a large number of pain syndromes affecting the head and neck. Current modalities include several medications, minimally invasive percutaneous measures, microsurgery of the nerve complex, and stereo tactically delivered radiation. Despite all these therapies, pain controls in many cases are still difficult. Botulinum toxin type A can alleviate different pain conditions, including neuropathic pain and headache, other than its effect on muscle contraction. So the aim of present article is to discuss for the first time, botulinum in head and neck originated pains. Comprehensive search of 3 databases (Pubmed, Ovid, Google Scholar) in 1965 - 2014 and a hand search of peer-reviewed journals for relevant articles were performed. After excluding articles related to pains other than head and neck region, articles were divided into two major subgroups, animal and human studies. There is not comprehensive review article in botulinum in head and neck pains. Botulinum may be effective in pains unresponsive to usual modalities. Botulinum puts down the release of several noncholinergic neurotransmitters (as well as substance P, calcitonin generelated peptide, and glutamate) related to neurogenic inflammation, and probably peripheral sensitization. Botulinum in neuropathic pain of trigeminal nerve, post-herpetic neuralgia, phantom pain and temporomandibular joint pain induce well response but poor response in myogenic facial pain. Most side effect of botulinum may be control with dosage regulations. Botulinum can alleviate at least a number of the symptoms of neuropathic pain. A further randomized controlled trial involving a large number of patients with long follow ups are needed to clarify its role in the management of neuropathic pain.

KEYWORDS: Botulinum neurotoxins, Pain, Head and neck.

Pharmacotherapy of atypical odontalgia: Report of an effective prescription

Hamed Mortazavi DDS, MSc¹, Maryam Baharvand DDS, MSc¹

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran
Email: marbahar@gmail.com

Abstract

BACKGROUND AND AIM: Atypical odontalgia (AO) is a subgroup of persistent idiopathic facial pain. We introduced a combination therapy of fluoxetine and clonazepam to treat AO. A 30-year-old female with the chief complaint of severe pain (#8 based on Visual Analogue Scale (VAS) in the site of extracted tooth #2 since 2 months ago was referred to the Department of Oral Medicine. The pain was of sharp quality continuing all day long and radiated to cervical muscles,



forehead, and mandible of the ipsilateral side and contra lateral structures. The patient was treated with fluoxetine 20 mg/d and clonazepam 0.5 mg/d. The pain intensity was reported almost #0 when the patient was re evaluated 1 month after the first visit. An 8-month follow up revealed no sign of pain and discomfort on the affected site. Combination therapy with clonazepam and fluoxetine has a positive effect in the treatment of AO.

KEYWORDS: Atypical odontalgia, Clonazepam, Fluoxetine.

Evaluation of the effect of quercetin in prevention and treatment of chemotherapy-induced oral mucositis in patients with hematologic malignancies

*Pegah Mosannen Mozafari DDS, MSc¹, Parisa Karoos DDS², Mohammad Mahdi Kooshyar MD³,
Atessa Pakjetrat DDS, MSc⁴, Maryam Amirchaghmaghi DDS, MSc⁴, Mahdokht Rashed Mohasel DDS⁵*

¹ Assistant Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Dentist, Mashhad, Iran

³ Associate Professor, Department of Hematology and Oncology, Imam Reza Hospital, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

⁴ Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

⁵ Postgraduate Student, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: mosannenp@mums.ac.ir

Abstract

BACKGROUND AND AIM: Oral mucositis is a serious complication of chemotherapy that results in painful debilitating inflammation, that sometimes ends in interruption of treatment. The study aims to evaluate the effect of Quercetin (a natural flavinoid) on prevention of and treatment of chemotherapy-induced oral mucositis in patients with blood malignancies.

METHODS: This double-blind, placebo-controlled randomized trial was carried out on 20 adult patients who underwent chemotherapy for blood malignancies during 2010-2011 at ImamReza hospital. Patients were divided in two groups (10 cases in case group and 10 cases in control group). Patients in the intervention group were administered two, 250 mg Quercetin capsules daily for 4 weeks. Patients in the placebo group received two placebo capsules containing lactose. Patients were examined every other day for evaluation of initiation and severity of oral mucositis. Data were analyzed by SPSS version 11.5.

RESULTS: 8 males and 12 females were enrolled with mean age 33±15.9. 15. Nine out of 20 patients developed mucositis (3 in case group and 6 in control group). 2 in case group 2 patients had grade 3 mucositis and 1 patient had grade 2. 6 control cases had grade 2 mucositis. Incidence of mucositis was lower in case group although it was not statistically significant. Healing time, age, gender, type of malignancy, drug type and duration of mucositis were not different in two groups.

CONCLUSION: The incidence mucositis was lower in the quercetin group but mucositis was more severe in case group which may be due to lower oral health status in case group.

KEYWORDS: Quercetin, Chemotherapy, Mucositis, Hematologic malignancies.

Taste disorder

Maryam Moshaverinia DDS, MSc¹, Rahele Ebrahimi DDS²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

² Postgraduated Student, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran
Email: moshaverm@sums.ac.ir

Abstract

BACKGROUND AND AIM: Taste disorder is defined as the experience of unexplained foul taste or a decrease in taste



sensation .It is common in the general population and is distressing for patient. Common causes of taste disorder are: radiation, head injury, exposure to certain chemical, infections, systemic disorders (sjogren syndrome, diabetes mellitus, renal, liver and thyroid disease, some drug, smoking, oral condition (lichen plannus ,burning mouth syndrome).Correct diagnosis of taste disorder is the first step in treatment of taste disorder. Due to the variety of causes ,there are many possible treatment that are effective in alleviating or treatment the symptom of taste disorder this include: vitamin B12,zinc supplementation ,niacin ,vitamin A, alpha lipoic acid, clonazepam, ice cube and cooling foods .This article is a review of causes and management of taste disorder.

KEYWORDS: Taste disorder, Radiation, Treatment, Diagnosis.

Low-level Laser therapy and implant complications management: a review

Arash Mottaghi DDS, MSc¹, Elham Zamani DDS²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Islamic Azad University (Khorasgan branch), Khorasgan, Iran

² Postgraduate Student, Department of Oral Medicine, School of Dentistry, Islamic Azad University (Khorasgan Branch), Khorasgan, Iran
Email: arash.mottaghi@gmail.com

Abstract

BACKGROUND AND AIM: Laser technology is developing with phenomenal speed, and new lasers with broad characteristics are available for use in different fields of dentistry. One of the basic purposes in dental treatment is providing a painless treatment for patients. This purpose may be achieved by the application of laser in dentistry. Low-level laser therapy (LLLT) is an internationally accepted title for biomodulation with low-level lasers which we use to achieve ideal therapeutic effects. The use of low-level laser therapy (LLLT) has been shown to have effects on many different pathological conditions including pain relief, wounds healing and nerve injury. LLLT has been shown to modulate the inflammatory process without adverse effects, by reducing pain and swelling. Several clinical studies and case reports were found in a Medline search investigate using laser for implant complications management, but not all of them report the putative positive laser effect using a placebo group The results of these researches were controversial. While some studies reported on a positive laser effect with regard to the investigated parameters others showed no or only negligible clinically relevant influence of LLLT. In conclusion, Low level laser therapy can be beneficial for the reduction of postoperative pain and edema. Its clinical efficiency and applicability with regard to implant treatment, however, require further investigation. This is in particular true for the optimal energy dosage and the number of laser treatments needed after treatment.

KEYWORDS: Low-level Laser, Therapy, Implant, Complications, Management.

Evaluation of serum level of oxidized and reduced glutathione and oxidant-antioxidant balance in patients with head and neck squamous cell carcinoma

*Ateke Movagharipoor DDS, MSc¹, Atessa Pakfetrat DDS, MSc², Zohreh Dalirsani DDS, MSc²,
Sayed Shagh Hashemy PhD³, Leila Mostaan MD⁴, Kazam Anvari MD⁵*

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Rafsanjan University of Medical Sciences, Rafsanjan, Iran

² Associate Professor, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

³ Assistant Professor, Department of Biochemistry, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

⁴ Assistant Professor, Department of Otolaryngology, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

⁵ Assistant Professor, Department of Radiology-Oncology, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
Email: ateke.movaghari@gmail.com

Abstract

BACKGROUND AND AIM: Squamous Cell Carcinoma (SCC) is the most common oral cancer. Early diagnosis based on detectable biomarkers such as glutathione has been recently interested by researchers. Glutathione includes two forms:



reduced form (GSH) and oxidized form (GSSG). GSH/GSSG ratio tends to decrease in severe oxidative stress and accumulation of GSSG. The aim of this study was to assess GSH and GSSG plus GSH/GSSG ratio as oxidant-antioxidant balance in the serum of the patients with head and neck SCC then comparing them with the healthy controls.

METHODS: Twenty new histopathologically proven head & neck SCC patients with no treatment and twenty healthy controls were included in the study. Reduced and oxidized glutathione plus GSH/GSSG ratio were measured spectrophotometrically with 5ml blood sample of each person. All of the analyses were performed by SPSS (v16.) using student's t-test or Mann-Whitney test. In all the tests, P value < 0.05 was considered statistically significant.

RESULTS: No significant difference in the level of GSSG was observed in the patients as compared with the healthy controls (P = 0.796). Whereas the level of GSH and GSH/GSSG ratio were significantly lower in the patients (P = 0.02, P = 0.011, respectively). There was no significant relationship between the level of GSH, GSSG and GSH/GSSG ratio with stage and grade of tumor.

CONCLUSION: Hence, level of GSH and GSH/GSSG ratio were significantly lower in the patients, GSH/GSSG ratio should be used for early diagnosis of head & neck SCC if next studies confirm our results.

KEYWORDS: Oxidized, Glutathione, Oxidant-antioxidant balance, Squamous cell carcinoma.

The role of genetic in orofacial pain and temporomandibular disorders

Mohsen Naseri PhD¹, Fariba Emadian Razavi DDS, MSc², Fatemeh Hajipoor³

¹ Assistant Professor, Department of Molecular Medicine, School of Medicine, Birjand University of Medical Sciences, Birjand, Iran

² Assistant Professor, Department of Prosthodontics, School of Dentistry, Birjand University of Medical Sciences, Birjand, Iran

³ Dental Student, School of Dentistry, Birjand University of Medical Sciences, Birjand, Iran

Email: naseri_m2003@yahoo.com

Abstract

BACKGROUND AND AIM: Pain is the most important feature of temporomandibular disorders (TMD) which after the toothache is second cause of orofacial pain. Genetic, hormonal and anatomical factors predispose persons to TMD and factors such as trauma, occlusal changes and parafunction accelerate it. E-search was done in PubMed. English literature from 2000 to 2014 is used. Several studies have shown correlation between DRD2 genes with bruxism. COMT gene carriers with low sensitivity to pain phenotype, apparently 2.3 times less is prone to TMD. Some studies suggest the effect of C Allele of polymorphism rs6313 of gene encoding HTR2A (serotonin receptor) on reducing serotonin connection to receiver of HTR2A in frontal cortex of brain that are risk indicators to bruxism and TMD. According to the most talented women in the risk TMD, the relationship between polymorphisms of the gene encoding estrogen receptor alpha 1 and the risk of TMD was found in women. Furthermore, polymorphisms in the gene for the delta opioid receptor 1 (OPRD1) Glutamate receptor, inotropic, N-methyl D-aspartate 2A (GRIN2A) is involved in creating the TMD. Multifactorial nature of TMD and bruxism shows that a large number of loci interact with each other, apart from the anatomical and hormonal factors play a significant role in the incidence of this complication.

KEYWORDS: Genetic, Temporomandibular Disorders, Orofacial Pain.

Regional odontodysplasia: a case report

Tahereh Nosrat Zehi DDS, MSc¹, Ehsan Vosoghi DDS², Atessa Pakfetrat DDS, MSc³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Zahedan University of Medical Sciences, Zahedan, Iran.

² Postgraduate Student, Department of Oral Medicine, School of Dentistry, Zahedan University of Medical Sciences, Zahedan, Iran

³ Associate Professor, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

Email: nosratzehi@yahoo.com

Abstract

BACKGROUND AND AIM: Regional odontodysplasia is a rare developmental anomaly involving both mesodermal and



ectodermal dental components in a group of contiguous teeth. It affects the primary and permanent dentitions in the maxilla and mandible or both jaws. Generally it is localized in only one arch. The etiology of this dental anomaly is uncertain. Clinically, affected teeth have an abnormal morphology are soft on probing and typically discolored, yellow or yellowish-brown. Radiographically, the affected teeth show a "ghost like" appearance. Patient is a 12 year-old man was referred to us with unerrupted anterior mandibule teeth. Radiographically these teeth have a large pulp chamber and thin layer of enamel and dentin with similar density. The management of regional odontodysplasia is some what controversial and revolves around the question of whether or not to remove the affected teeth.

KEYWORDS: Ghost teeth, Regional odontodysplasia.

How can dentists help their patients to stop smoking?

Atessa Pakfetrat DDS, MSc¹, Pegah Mosannen Mozafari DDS, MSc²

¹ Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Assistant Professor, Department of Oral Medicine, Dental Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: pakfetrata@mums.ac.ir

Abstract

BACKGROUND AND AIM: Tobacco use, which remains the leading cause of preventable disease and death in all over the world, can have a significant impact on oral health. Thus, it becomes imperative to provide resources to all oral healthcare providers to assist them in actively addressing tobacco use in their patient populations. As many oral health professionals cite a lack of appropriate informational resources as the key barrier to engaging in such discussions with their patients, a resourceful pamphlet can be a great aide for the dental team.

METHODS: Available evidence suggests that behavioral interventions for tobacco cessation conducted by oral health professionals incorporating an oral examination component in the dental office may increase tobacco abstinence rates among both cigarette smokers and smokeless tobacco users.

RESULTS: The dental practitioner is in an ideal position to identify oral conditions that are visual signs of the impact of smoking on the body, such as dental staining or periodontal disease and oral cancer, in addition they often have longstanding rapport with patients and see them on a regular basis. This review provides dentists to develop at least one model (5As – ask, assess, advise, assist and ask again) that assists the integration of smoking cessation into routine dental practice

CONCLUSION: This presentation based on the most recent knowledge and components of effective tobacco cessation programs, and will enable dentists to: learn the skills, knowledge and attitudes necessary for helping your patients become tobacco free employ interventional strategies, including the use of medication, nicotine replacement modalities and behavioral therapies.

KEYWORDS: Dentists, Patients, Smoking.

Dental implants in patients with mucocutaneous disorders

Solmaz Pourzare Mehrbani DDS, MSc¹, Hossein Eslami DDS, MSc¹, Tahmooreh Abdollahian DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran
Email: solmaz_pourzare@yahoo.com

Abstract

BACKGROUND AND AIM: While some oral mucosal disorders such as lichen planus, pemphigoid, pemphigus vulgaris, and epidermolysis bullosa, commonly have been regarded as contraindications for the placement of implants, the



benefits of such treatment in these patients sometimes outweigh the risks. Surgeons should be able to recognize these disorders and have the tools necessary to treat these conditions so that they can render the appropriate surgical care. Dental implant rehabilitation in patients with mucocutaneous disorders; with special considerations; such as injecting the solution slowly in order to avoid tissue damage, Drilling and irrigation are only used to create a minimum aperture to allow access with small-diameter implants.

- Success rate for lichen planus: 100%
- Success rate for epidermolysis bullosa: 75%-100%

Based on our review of the literature, dental implant rehabilitation in patients with mucocutaneous disorders; with special considerations; is seen to be a valid treatment option, with a high percentage success rate. Long-term patient follow-up is essential in order to periodically monitor the condition of the disease and of the implants.

KEYWORDS: Dental implants, Patients, Mucocutaneous disorders.

Evaluation of reliability sialometry method in the xerostomic patient and control group

Maryam Rad DDS, MSc¹, Mohammad Reza Zarei DDS, MSc², Goli Chamani DDS, MSc², Zahra Rostaie Zadeh DDS, MSc³

¹ Specialist of Oral Medicine

² Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Kerman University of Medical Science, Kerman, Iran

³ Assistant Professor, Department of Oral Medicine, School of Dentistry, Yazd University of Medical Sciences, Yazd, Iran
Email: rzahra87@yahoo.com

Abstract

BACKGROUND AND AIM: Xerostomia is a disturbing problem that can impair oral health and significantly reduces quality of life. There are different methods for diagnosis of xerostomia. One of these methods is sialometry which can collect stimulated and non-stimulated saliva. The main objective of this study is to assess the reliability of sialometry test.

METHODS: Based on the response to the FOX questionnaire, 95 patients with xerostomia and 40 healthy volunteers participated in this study. Measurements for unstimulated and stimulated saliva was performed at 8-9 am and 10-11 am and repeated 2-4 days after the initial measuring. Saliva collection was performed for 5 minutes. Spearmint-flavored sugar-free chewing gum was used for stimulated saliva.

RESULTS: There was no statistically significant difference in volume of stimulated and non-stimulated saliva at four different times in xerostomia and control groups. A significant relationship was found between age and stimulated or unstimulated saliva at four times ($p = 0.011$). Based on the results of this research the best Cut off value of unstimulated saliva for diagnosis of xerostomia is at the point of 0.147 (with 70% sensitivity and 65% specificity). Also the best Cut off value of stimulated saliva is at the point of 1.28 (with 70% sensitivity and 50% specificity).

CONCLUSION: According to the results of this study, sialometry test is a reliable method for diagnosis of xerostomia. It seems more studies with larger sample size are needed to obtain an accurate Cut off value for diagnosis of xerostomia

KEYWORDS: Xerostomia, Reliability, Sialometry, Saliva.

Diagnostic value of ultrasonography in the evaluation of the temporomandibular joint disorders

Hoda Rahimi DDS, MSc¹

¹ Specialist of Oral and Maxillofacial Radiology, Kerman, Iran
Email: hoda.rahimi57@gmail.com

Abstract

BACKGROUND AND AIM: This review represents an investigation of the accuracy and clinical usefulness of



ultrasonography (US) and a comparison between this method and other methods such as CT, CBCT and MRI for the diagnosis of temporomandibular joint (TMJ) disorders. Ultrasonography is a noninvasive and inexpensive diagnostic procedure that can be suggested for the evaluation of TMJ disorders including osteoarthritis, effusion and disk displacement with particular accuracy in the detection of disc displacement and joint effusion. Limitations are especially related to the scarce accessibility of the medial part of the TMJ structures, and also its dependence on operator's clinical knowledge and training.

KEYWORDS: Ultrasonography, Temporomandibular joint disorders.

A case report of Sjogren Syndrome with unusual sign and symptom

Moones Rajabi DDS, MSc¹, Goli Chamani DDS, MSc²

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: moones.rajabi@gmail.com

Abstract

BACKGROUND AND AIM: For precise diagnosis of Sjogren disease, we must refer to international criterion. In some cases, giving diagnosis is a real challenge and the clinician faces numerous difficulties. Classification criteria sets are primarily developed for use in clinical trials and observational studies. Nonetheless, since 2002, the diagnostic performance of the American-European Consensus Group Criteria for primary Sjogren Syndrome has been frequently compared with the other different classification criteria sets in daily clinical practice such as Copenhagen criteria, Californian criteria and American College of Rheumatology criteria. The effectiveness of these international classification criterion for Sjogren has always been a debate. Although the Sicca symptoms are the hallmarks of Sjogren syndrome, any organ or mucosal surface may be involved during the disease course and patients might experience a huge number of clinical manifestations (i.e. constitutional symptoms, arthralgias or arthritis, skin vasculitis, haematological disorders, lung interstitial diseases, kidney failure, peripheral and central neuropathies and gastrointestinal tract disorders). The patient is a 22 year old man who was referred to the oral medicine department of Kerman faculty of Dentistry with chief complaint of rampant caries. Past medical history showed severe dryness of oral mucosa during the past 2 years. In addition lab tests revealed highly positive RF and ANA. The rest of the tests including, Anti-SSA, Anti-SSB were within normal range and biopsy result from minor salivary glands of the lower lip was normal. Moreover, the patient reported no eye dryness. In this paper, we not only discuss the above case, but also the latest treatment approaches for similar patients and a comparison of different international criterion for diagnosis of Sjogren syndrome.

KEYWORDS: Sjogren Syndrome, Sign, Symptom.

Hypnosis and Primary Headaches

Mohsen Ramazani DDS, MSc¹

¹ Advanced Hypnotherapist, Assistant Professor, Department of Endodontics, School of Dentistry, Mazandaran University of Medical Sciences, Sari, Iran

Email: dr.mohram@yahoo.com

Abstract

BACKGROUND AND AIM: Headache is a grave affliction with various variations and may negatively affect the lives of individuals experiencing them. With electronic search through the last 10-year publications accompanying with author's



experience this review presentation has been prepared. Primary headaches, such as stress or tension headache, cluster headache and migraine headache, can be very seriously handicapping. Headaches are typically treated using over-the-counter pain relievers such as aspirin, ibuprofen or paracetamol, and sometimes avoidance of common causes, like noises or some kinds of foods. Caffeine, Magnesium and Vitamin B2 have also been regarded as useful in order to treat migraine. Drugs are however expensive and may have undesired side effects, particularly for people who have to take them on a daily basis. Hypnosis has indeed shown to be working and can help to get rid of pain anywhere in the body, including the head, as well as becoming more relaxed meanwhile. Stress is a very common cause of headache, and specific hypnotic techniques have been developed to get rid of both stress and headaches quickly. People who have migraine or cluster headache are often able to feel the first symptoms before it really occurs, and may learn self-hypnosis techniques to get rid of them before they hurt too much. Hypnotherapy is a soothing modality that helps find the help the patient. Regarding the benefits of hypnosis for primary headaches, it is strongly suggested to get familiar with this user-friendly method to help patients much more easily.

KEYWORDS: Hypnosis, Primary, Headaches.

The role of orthodontics in temporomandibular disorders

Zahra Saberi DDS, MSc¹, Zahra Golestannejad DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran
Email: dr_zgolestan@yahoo.com

Abstract

BACKGROUND AND AIM: Temporomandibular Disorder (TMD) is the main cause of pain of non-dental origin in the orofacial region. The etiology and the pathophysiology of TMD is poorly understood. It is generally accepted that the etiology is multifactorial. Occlusion is frequently cited as one of the major etiological factors causing TMD. Aesthetic awareness, the development of new aesthetic orthodontic techniques and the possibility of improving prosthetic rehabilitation has increased the number of adults seeking orthodontic treatment. The shift in patient age also has increased the likelihood of patients presenting with signs and symptoms of TMD and orthodontists may be blamed for causing TMD by unsatisfied patients. Thus, the aim of this article is to critically review evidence for a possible association between malocclusion, orthodontic treatment and TMD. TMD is a multifactorial pathology, and it is difficult to demonstrate a direct correlation between one of the causes, such as occlusion, and TMD. Based on this concept, oro-facial pain and TMD require a comprehensive team approach. It is important to rule out other causes of facial pain before investigating the teeth as the potential etiological factor. With regard to TMJ dysfunction, the treatment goals should of course be to reduce pain and to improve function. The reversible therapies commonly used for the management of TMJ dysfunction include physiotherapy, pharmacotherapy and psychological therapy.

KEYWORDS: Temporomandibular disorder, Orthodontic treatment, Oro-facial pain.

Dental pain due to changes in ambient pressure (Barodontalgia)

Mahnaz Sahebjaamee DDS, MSc¹, Bita Rohani DDS, MSc²

¹ Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran.

² Assistant Professor, Department of Oral Medicine, School of Dentistry, AJA University of Medical Sciences, Tehran, Iran
Email: rohani_bita@ajaums.ac.ir

Abstract

BACKGROUND AND AIM: Barodontalgia is tooth pain and sensitivity that is created by barometric (environmental) pressure changes. These pressure changes can be experienced in high altitude, e.g. in flight or during deep diving. Thus, apparently healthy teeth which are at ground level without pain become markedly painful. Different theories have been



suggested to explain the pathophysiology of barodontalgia. Indeed, the main reason for creating this type of toothache is air bubbles trapped in closed spaces. Including under the restoration of the tooth, the pulp canal and ..., because these gases can increase in volume and stimulate pain receptors and tooth nerve endings. This issue is raised among people who are exposed to such a situation for entertainment and recreation, or traveling and it is very important for pilots and divers due to the delicacy of their jobs, particularly in precise military missions. Thus the tooth pain that is caused by sudden changes in ambient pressure, in addition to possibly endangering the health and lives of them, can lead to mission failure. So, knowledge of dentists in the face of such cases is essential. So far, extensive research has been done on the causes of barodontalgia and ways to prevent them. The purpose of this study is to review the etiology, pathophysiology and approaches of prevention and treatment. Despite barodontalgia is relatively rare, due to the result in annoyance in pilots and divers as well as its impact on the quality of the passengers traveling on the flight, it is important to be careful about its prevention.

KEYWORDS: Dental pain, Ambient pressure, Barodontalgia.

The report of Ameloblastoma with giant cell hyperparathyroidism expression in anterior mandible of 70 year old man

Sahand Samiei Rad DDS, MSc¹, Elaheh Tohidi DDS, MSc²

¹ Assistant Professor, Department of Oral and Maxillofacial Surgery, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Assistant Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

Email: sahand_samiea@yahoo.com

Abstract

BACKGROUND AND AIM: Ameloblastoma is the second most common odontogenic tumor of maxillofacial region with benign but aggressive nature. Which main treatment is surgical resection. That differs from brown tumor of hyperparathyroidism treatment which is medical treatment and correction of systemic disturbances. There were some reports of presence of hypercalcemia with malignancies and ameloblastic carcinoma, but there was only one report in 2011 for presence of hypercalcemia with benign ameloblastoma. This is the second report of hypercalcemia and giant cell hyperparathyroidism expression in 70 y/o man. Patient was a 70 year old man with firm and painful 20 *25 mm mass in anterior mandible from 5 month ago, with no drug and addiction history. In laboratory examination, the level of Ca, P, PTH were higher and Vit D level of serum was lower than normal limits. In radiologic examination, radiolucency of anterior mandible and resorption of finger bones were seen. According to these documents and with assumption of brown tumor of hyperparathyroidism, patient was referred to internist for medical therapy but because of pain and his interest for surgery, excisional biopsy was performed which report was ameloblastoma surprisingly. 6 month after full excision of tumor, all of laboratory test became normal. Ameloblastoma can mimic giant cell hyperparathyroidism expression which can cause challenges in diagnosis and treatment plans.

KEYWORDS: Ameloblastoma, Giant cell, Hyperparathyroidism, Hypercalcemia.

Effect of cedar honey in the treatment of oral lichen planus: a randomized controlled clinical trial

*Majid Sanatkhani DDS, MSc¹, Pegah Mosannen Mozafari DDS, MSc¹, Maryam Amirchaghmaghi DDS, MSc²,
Mohsen Najafi Fathi³, Mohammad Sanatkhani⁴, Naghmeh Sarjani DDS⁵, Amir Abbas Azarian⁶*

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

³ Department of Veterinary and Biotechnology, Razi Vaccine and Serum Institute, Mashhad, Iran



Iranian Association of Oral Medicine 2014 Meeting and
First National Congress on Orofacial Pain Kerman, Iran

15-17 October 2014



⁴Dental Student, Szeged Dental School, Hungary

⁵Dentist, Private Clinic, Tehran, Iran

⁶Department of Statistics, Payame Noor University, Tehran, Iran

Email: sanatkhanim@mums.ac.ir

Abstract

BACKGROUND AND AIM: Oral Lichen Planus (OLP) is a chronic mucocutaneous disease with an immunological etiology. This study was conducted to evaluate the effect of Cedar honey in treatment of erosive- atrophic OLP.

METHODS: Thirty patients with confirmed clinical and histopathologic of OLP participated in a randomized clinical trial in Mashhad Dental School. Patients were randomly allocated in two groups. Both groups received the standard treatment of OLP (dexamethasone mouthwash 0.5mg 3 times daily and fluconazole capsule 100 mg daily). Intervention group received Cedar honey (20 ml 3 times daily, swish and swallow technique) in addition to standard treatment. The patients were followed for 4 weeks. The pain and severity of the lesions were recorded at the initial visit and follow ups. All recorded data were analyzed with chi- square, T test, ANOVA using SPSS version 11.5 and p-value less than 0.05 was considered significant.

RESULTS: Thirty patients were included in the study. Both groups had markedly reduction in pain, size of erosive area and atrophic lesions specially in first follow up but there was not a significant difference between two groups ($p > 0.05$). Honey was effective in healing of ulcerative lesions. (The average recovery in experimental group was 69% while the average relief of ulcerative lesion in control group was 50%). but this difference was not significant ($p = 0.896$).

CONCLUSION: No significant difference was found in the treatment of atrophic and erosive lesions of OLP by using honey as an alternative treatment, but it may be effective in ulcerative lesions of OLP, although more research with larger sample size is necessary.

KEYWORDS: Cedar honey, Clinical trial, Oral lichen planus, Treatment.

Salivary IgA and IgG in oral lichen planus and oral lichenoid

Farimah Sardari DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Rafsanjan University of Medical Sciences, Rafsanjan, Iran
Email: drsardari_farimah@yahoo.com

Abstract

BACKGROUND AND AIM: The objective of this study was to assess the level of salivary IgA and IgG in oral lichen planus (OLP) and oral lichenoid reactions (OLR) patients as diagnostic factors to the differential diagnosis of OLP, OLR diseases.

METHODS: Saliva samples were obtained from 50 OLP, 50 OLR patients and 50 healthy subjects between April 2010 and October 2011. The clinical relevant data taken into account were: Demographical data, previous medication, and level of salivary IgA and IgG. Each sample was assessed to determine the level of salivary IgA by ELISA test and salivary IgG by radial immune diffusion.

RESULTS: The mean of salivary IgA and IgG in patients were 119.01 ± 114.18 mic/ml and 3.25 ± 1.81 mic/ml, respectively. There were no significant differences for salivary IgA and IgG between OLP and OLR, but the mean of salivary IgA and IgG in OLP and OLR patients were significantly more than normal group (P -value > 0.05). The cut-off value was set at < 72 mic/ml for salivary IgA in both OLP and OLR groups and set at < 3.7 mic/ml for salivary IgG. On comparing the AUCs, there was no significant difference between AUCs for IgA (0.715 ± 0.05 vs. 0.69 ± 0.5 , for OLP and OLR patients, respectively, $P = 0.7$) and IgG (0.681 ± 0.05 vs. 0.548 ± 0.06) for OLP and OLR patients, respectively, $P = 0.1$).

CONCLUSION: Our results showed that the level of salivary IgA and IgG in OLP and OLR patients is higher than healthy controls, but they cannot be used as diagnostic factors to the differential diagnosis of OLP and OLR.

KEYWORDS: IgA, IgG, Oral lichen planus, Oral lichenoid reactions.



Oral osteosarcoma: a case report and analysis of previously reported cases

Shiva Shirazian DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran
Email: shiraziash@tums.ac.ir

Abstract

BACKGROUND AND AIM: Osteosarcoma is the most common malignancy of mesenchymal cells after hematopoietic neoplasms. Most originate within bones, but the occurrence of this malignancy in the jaw bones is rare. There is controversy about the characteristics of this tumor in the literature. The aim of this paper was to collect the previous reported data and provide a statistical analysis of them. Additionally, we have reported a case of mandibular osteosarcoma.

KEYWORDS: Oral, Osteosarcoma, Mesenchymal cells, Mandibular.

Mast cells number in hyperkeratosis and dysplastic oral mucosa and oral squamous cell carcinoma

Molouk Torabi DDS, MSc¹, Jahangir Haghani DDS, MSc², Maryam Rad DDS, MSc³, Mohammad Mehdi Ebrahimi DDS⁴

¹ Associate Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Associate Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Specialist of Oral Medicine, Kerman, Iran

⁴ Dentist, Kerman, Iran

Email: m.torabi.p@gmail.com

Abstract

BACKGROUND AND AIM: Mast cells are normally present in connective tissue, and release a variety of potent mediators like histamine, leukotrienes and cytokines. The purpose of the present study was to compare mast cells number in oral SCC, hyperkeratosis and dysplastic mucosa.

METHODS: Paraffin embedded specimens from OSCC, hyperkeratosis and dysplastic mucosa were retrieved from archives of the Kerman oral pathology department. Serial sections of 5µm thickness were made from paraffin embedded tissue blocks. All sections were stained with 1% Toluidine blue. The number of mast cells counted in 5HPF. Data were analyzed in SPSS using T test and linear regression tests.

RESULTS: 44.8% of lesions were in woman. The mean age of patients were 57.41±14.69 years. The mean number of mast cells was 8.03±4.46. Maximum number of mast cells were in OSCC. There was no significant difference between mean number of mast cells with different lesions and sex. There was significant correlation between number of mast cells in OSCC and normal mucosa. There was not significant difference between mast cells number in hyperkeratosis and dysplastic mucosa with normal mucosa.

CONCLUSION: Mast cells number were higher in OSCC, hyperkeratosis and dysplastic oral mucosa compared with normal oral mucosa.

KEYWORDS: Oral SCC, Dysplasia, Hyperkeratosis, Mast cell, Toluidine blue.



The role of biopsy in oral lichen planus lesions: diagnosis or treatment?

Mahdieh Zarabadipour DDS, MSc¹, Mahsa Esfahani DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran
Email: mahdieh.zarabadi@gmail.com

Abstract

BACKGROUND AND AIM: Oral lichen planus (OLP) is a chronic inflammatory immunologic mucocutaneous disease that is occurred by basal cell layer degeneration. So many factors are known involved in occurring the lesions such as stress, diabetes mellitus, hepatitis C, trauma, drug sensitivity and metal contact. But the accurate etiology is yet unknown. OLP is known as a lesion that is potentiated for malignancy and is able to become as oral squamous cell carcinoma (OSCC). But its malignant potential is yet controversial. Because of cell proliferation, the disease can be as premalignant lesion. So continued follow ups and diagnostic biopsies are suggested. The disease is not curable but it can be controlled and managed. In addition, controlling biopsies, after diagnosis, can be useful for following the dysplasia and the process of malignancy in these lesions.

KEYWORDS: Biopsy, Oral lichen planus, Premalignancy, Oral squamous cell carcinoma.

Posters

Global Year Against OROFACIAL PAIN

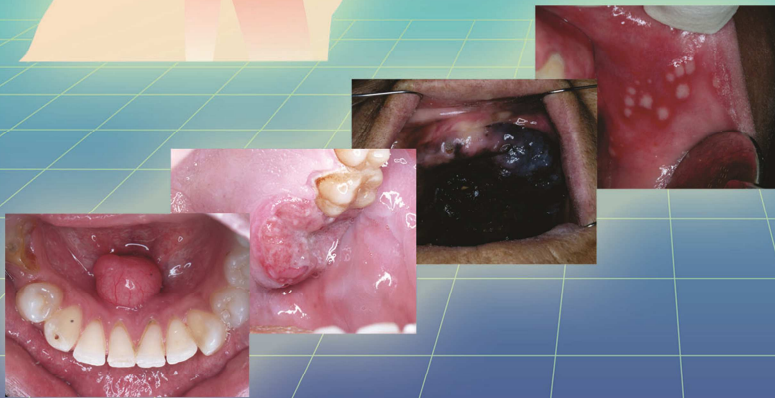


Oral Medicine Update

- Oral ulcerations
- Oral cancer and precancer
- Oral lichenoid lesions

Orofacial Pain Update

- Odontogenic toothache
- Trigeminal neuropathic pain
- Trigeminal neuralgia
- Burning mouth syndrome
- Primary headaches
- Temporomandibular disorders





Neuropathic pain of oro-facial region: a review of literature

Farid Abassi DDS, MSc¹, Noushin Jalayer Naderi DDS, MSc²

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Shahed University, Tehran, Iran

² Associate Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Shahed University, Tehran, Iran
Email: abassi110@yahoo.com

Abstract

BACKGROUND AND AIM: Trauma and infections are common causes of pain in oro-facial regions. Neuropathic pains are originate from the diseases of the somatosensory nervous system. The patients avoid dental procedures because of pain. As a result; dentist may perhaps have got to change his/her treatment plan. The aim of study was to comparison of signs and treatment plan between inflammatory and neuropathic pains. The study was review of literature. All researches from 2000 to 2013 in different medical sites was studied and data were comprised. Inflammatory pains are normal response to sensory nerves. The neural structures are normal. After healing the tissue response is reversible. Pain is protective for healing. Neuropathic pain originates from abnormal neural structure and the neural structure is abnormal. The pain is not protective. Dental treatment may be completed under general anesthesia. This treatment will prevent sensitization. Treatment and pain management of neuropathic pain requires a multidisciplinary team comprising a psychologist and dentist. Dentist must concern to patient tolerance and anxiety.

KEYWORDS: Oro-facial pain, Inflammatory pain, Neuropathic pain.

Dental trauma: how to avoid common mistakes in diagnosis and treatment

Tahmoores Abdollahian DDS, MSc¹, Solmaz Pourzare Mehrbani DDS, MSc¹, Hossein Eslami DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran
Email: solmaz_pourzare@yahoo.com

Abstract

BACKGROUND AND AIM: Traumatic dental injuries are for the most part unanticipated events that, if not managed appropriately, can have serious consequences for the patient. Traumatic injuries to teeth occur quite frequently and the initial treatment is often done with little time to consider long term outcomes. Using best current evidence one can apply a sound biological approach to the management of such traumatic injuries and at the same time plan for future needs necessitated by outcomes such as root resorption and pulpal problems. Since children and young people are most often involved in dental trauma, it is very important to make both short and long term plans, taking into account their developing teeth and jaws. The initial efforts involve saving teeth, even those with questionable survival potential, in order to better plan for the patient's future dentition. The purpose of this review is to describe the current concepts in establishing diagnosis descriptive of specific traumatic entities, and to delineate recommended treatment approaches for these injuries based on available evidence. The goal of this presentation is three fold: 1)- Recognize the many types and manifestations of dental trauma; 2)- Predict the various outcomes such as pulpal problems and root resorption; and 3)- Choose the most favorable course of treatment for healing problems following various injuries.

KEYWORDS: Dental trauma, Mistakes, Diagnosis, Treatment.



Temporomandibular Joint Disorders (TMD) and Radiographic Evaluation

Masoomeh Afsa DDS, MSc¹

¹ Assistant Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Hormozgan University of Medical Sciences, Bandar Abbas, Iran
Email: masoomeh_afsa@yahoo.com

Abstract

BACKGROUND AND AIM: In recent decades, TMJ imaging has had many changes and provide valuable information about the anatomy and function of this joint. However, clinical examination is the principal part of TMD management, radiographic images have an additional role. Radiographic and diagnostic images can help to evaluate and estimate the (dis) integrity of Joint components, disease extension and follow up after treatment. Clinical examination and making a list of differential diagnoses determine the best imaging modality. This presentation reviews the different imaging modalities in TMJ disorders and diseases, indications, advantages and limitations of them.

KEYWORDS: Temporomandibular joint disorders, Radiographic, Evaluation.

The effect of ovalbumin on orthodontic induced root resorption

*Hosseinagha Aghili DDS, MSc¹, Mohammad Danesh Ardekani DDS, MSc², Seyed Amir Reza Fatahi Meybodi DDS, MSc¹,
Mohammad Hossein Toodehzaeim DDS, MSc¹, Jalil Modaresi DDS, MSc³, Reza Mansouri PhD⁴, Ehsan Momeni DDS, MSc⁵*

¹ Assistant Professor, Department of Orthodontics, School of Dentistry, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

² Assistant Professor, Department of Oral Pathology, School of Dentistry, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

³ Assistant Professor, Department of Endodontics, School of Dentistry, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

⁴ Assistant Professor, Department of Immunologist, School of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

⁵ Assistant Professor, Department of Oral Medicine, School of Dentistry, Arak University of Medical Sciences, Arak, Iran

Email: momeni6384@gmail.com

Abstract

BACKGROUND AND AIM: This randomized trial was undertaken to investigate the effect of experimentally induced allergy on orthodontic induced root resorption.

METHODS: A total of 30 Wistar rats were divided randomly into test and control groups. Starting from the first 3 days, the rats in the test group were injected intra-peritoneally by 2 mg ovalbumin as allergen and 0.5 mg Alum as adjuvant. Afterward only allergen was injected once a week. The control group was injected by normal saline. After 21 days, Wistar immunoglobulin E was measured and peripheral matured eosinophil was counted. A total of 50 g nickel-titanium closed coil spring was legated between right incisor and first molar. All animals were sacrificed after 14 days. The mesial root of the right and left first molar was dissected in a horizontal plane. The specimens were divided into four groups considering whether force and/or ovalbumin was applied or not. Root resorption was measured and compared among these groups. Repeated measures analysis of variance (ANOVA), and Bonferoni tests were used to analyze the data. The level of significance was determined at 0.05.

RESULTS: In general, the differences were insignificant ($P < 0.05$). As the only exception, the group in which both ovalbumin and force were applied had significantly more root resorption than the group in which neither force nor ovalbumin was applied ($P > 0.001$).

CONCLUSION: Allergy may increase the susceptibility to root resorption. Application of light force, periodical monitoring of root resorption and control of allergy are advisable.

KEYWORDS: Allergy, Orthodontic tooth movement, Ovalbumin, Rat, Root resorption.



Laser and maxillofacial disorders

Fatemeh Alimoradi DDS¹, Uldus Zamani DDS¹, Arash Jangjoo DDS²

¹ Postgraduate Student, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran

² Postgraduate Student, Department of Prosthodontics, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran
Email: alimoradi491@gmail.com

Abstract

BACKGROUND AND AIM: During the last years, low power, low level or soft lasers have been commercially available for routine clinical use. Two principally different main areas have been proposed as being suitable for laser treatment: inflammatory diseases and pain conditions of any kind. The essential photobiological effects in low power laser therapy are unknown. In contrast to surgical lasers, such as the CO₂-laser and the Neodymium: YAG-laser, most low power lasers are not able to raise the temperature in the irradiated tissues by more than 1 °C. As a consequence of the low energy delivered to the tissue, a photothermal effect is unlikely. A photochemical effect cannot, however, be excluded. Light is able to activate different biological molecules - chromophores - depending upon the wavelength of the light. The use of low power infrared diode lasers is widely recommended for clinical use, especially in the treatment of ulcerative or inflammatory diseases, functional disorders, chronic pain conditions, and is beneficial for the treatment of many disorders of the maxillofacial regions such as temporomandibular joint (TMJ) pain, trigeminal neuralgia, muscular pain, and tooth hypersensitivity postoperatively and in small hemangiomas also accelerate healing of soft tissue injuries.

KEYWORDS: Laser, Maxillofacial disorders.

Triennial review SCC diagnosed in patients referred to the department of oral medicine, dental school of babol

Zahra Alizadeh¹, Fatemeh Rahmani Kafshgari¹, Simin Nouri¹, Hamed Hossein Kazemi DDS, MSc²

¹ Dental Student, School of Dentistry, Babol University of Medical Sciences, Babol, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Babol University of Medical Sciences, Babol, Iran
Email: siminnouri@yahoo.com

Abstract

BACKGROUND AND AIM: Over the past three years (1390-93), the Expert Division of Oral admitted, 13 patients in terms of clinical and histopathologic diagnosis were SCC.

Data from these patients are as follows:

- Mean age: 70 years
- 4 men, 8 women
- 5 tongue, 3 buccal mucosa, 2 maxillary ridge, 2 mandibular ridge.
- 10 patients with pain.
- In 3 cases, lymph node pathology were positive.
- 3 cases were associated with paresthesia.
- 3 asymmetry
- 12 patients had full denture.
- 3 patients (2 men and a woman) had risk factors for smoking and alcohol.

KEYWORDS: SCC, Lymph node pathology, Pain.



Comparing the effects of cryotherapy versus topical corticosteroids in the treatment of oral lichen planus

Dariush Amanat DDS, MSc¹, Hooman Ebrahimi DDS, MSc², Maryam Zahed DDS, MSc³, Nasim Zeini DDS, MSc⁴

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

² Specialist of Oral Medicine, Shiraz, Iran

³ Assistant Professor, Department of Oral Medicine, School of Dentistry, Ardabil University of Medical Sciences, Ardabil, Iran

⁴ Assistant Professor, Department of Oral Medicine, School of Dentistry, Yasuj University of Medical Sciences, Yasuj, Iran

Email: maryamzhd@yahoo.com

Abstract

BACKGROUND AND AIM: Oral Lichen Planus (OLP) is a chronic inflammatory disease of the oral mucosa with treatment challenges for clinicians. The objective of this study is to compare the effects of cryotherapy as a new modality with topical corticosteroids as a conventional therapy in the treatment of OLP.

METHODS: Thirty patients with bilateral symptomatic OLP lesions were selected. From each patient a lesion on one side was chosen randomly for a single session of cryotherapy with nitrous oxide gas and the other lesion received Triamcinolone Acetonide 0.1% ointment in orabase. Treatment outcome was measured by means of Thongprasom sign score, pain score (Visual Analogue Scale), and severity of lesions before treatment and after 2, 4 and 6 weeks of treatment.

RESULTS: In both methods of treatment sign score, pain score and severity of lesions was significantly reduced in all follow up sessions ($P < 0.05$). But the treatment outcome and relapse was not significantly different between the two treatment methods ($P > 0.05$).

CONCLUSION: Cryotherapy with nitrous oxide gas is as effective as topical Triamcinolone Acetonide in the treatment of OLP with no systemic side effects and it needs less patient compliance. It can be considered as an alternative or adjuvant therapy in OLP patients to reduce the use of treatments with adverse effects. [Clinical Trial #: IRCT2012120311656N1].

KEYWORDS: Oral Lichen Planus, Cryotherapy, Topical Corticosteroids.

Primary leiomyosarcoma of the maxilla; A case report

Sara Amanpour DDS, MSc¹, Farzaneh Esmaeli², Sorena Fardisi DDS³

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Dental Student, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Postgraduate Student, Department of Oral and Maxillofacial Surgery, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

Email: esmaelifarzaneh@yahoo.com

Abstract

BACKGROUND AND AIM: Leiomyosarcoma is a malignant neoplasm of smooth muscle origin and accounts for about 7% of all soft-tissue sarcomas. Most of these tumors occur in the uterus, gastrointestinal tract and retroperitoneum. Leiomyosarcoma of the oral cavity is extremely rare. A 36-year-old man was referred with chief complaint of tooth pain and swelling in anterior left side of maxilla. Oral examination revealed a soft and tender mass which was covered by the normal mucosa. The teeth were mobile. Computed tomography scans revealed a space-occupying mass with destruction of maxillary alveolar bone and anterior hard palate extending to the floor of the sinus. Incisional biopsy showed a neoplasm composed of spindle-shaped cells with fascicular pattern. A moderate cellular pleomorphism was observed, nuclei were large, hyperchromatic and cigar-shaped. Mitotic figures could occasionally be identified. Immunohistochemistry was done and the findings were consistent with the diagnosis of leiomyosarcoma. The maxilla was resected and microscopic examination confirmed the primary diagnosis. Although sarcomas such as



leiomyosarcoma is extremely rare in the jaws, they should be considered in the differential diagnosis of destructive lesions in maxilla and mandible.

KEYWORDS: Leiomyosarcoma, Maxilla, Immunohistochemistry.

Elastofibroma with familial florid cemento-osseous dysplasia; A case report

Sara Amanpour DDS, MSc¹, Farzaneh Esmaeeli², Sorena Fardisi DDS³

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Dental Student, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Postgraduate Student, Department of Oral and Maxillofacial Surgery, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

Email: esmaelifarzaneh@yahoo.com

Abstract

BACKGROUND AND AIM: Elastofibroma is a rare lesion. It is usually localized to the inferior pole of the scapula and the serratus muscle over the ribs. Very rarely, elastofibroma is found in other sites. It is relatively frequent among elderly women, with a mean age of 70 years. Symptoms are local swelling and pain. The patient is a 20-year-old man with chief complaint of slow growing swelling in the left parotid area since 3 years ago. On palpation, the mass was non tender, firm and easily movable. Jaw radiographs showed that this lesion is not related to the bone, but panoramic radiograph of the patient showed florid sclerotic areas throughout both jaws. Panoramic radiographs of the patient's father and his sister also showed similar lesions. After incisional biopsy of these radiopaque lesions, based on both radiologic and microscopic findings, diagnosis of florid cement-osseous dysplasia was done. Fine needle aspiration of the other lesion in parotid area revealed benign spindle shape cells and collagen fibers. The mass was completely excised. The lesion was composed of eosinophilic collagen and elastic fibers, with scattered aggregates of fat cells without atypia and mitotic activity. Elastic-van Gieson and Masson-trichrome stain identified abnormal elastic fibers and abundant collagen fibers, respectively in favor of elastofibroma. Rare soft tissue neoplasms such as elastofibroma should also be considered in differential diagnosis of soft tissue masses of head and neck.

KEYWORDS: Elastofibroma, Face, Familial florid cement-osseous dysplasia.

Comparison of serum level of oxidative stress factors and hsCRP in patients with oral lichen planus before and after treatment

Maryam Amirchaghmaghi DDS, MSc¹, Eshagh Hashemi PhD², Shideh Gharaie³, Sanaz Karghozar³,
Samaneh Vasigh³, Fereshteh Jahed Keyhani³, Banafsheh Alirezaie³

¹ Associate Professor, Department of Oral Medicine, Oral & Maxillofacial Diseases Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Assistant Professor, Department of Biochemistry, Addiction Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

³ Dental Student, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: shide.gharai@yahoo.com

Abstract

BACKGROUND AND AIM: Oral lichen planus (OLP) is an inflammatory mucocutaneous disease with an etiology of unknown origin. Oxidative stress is the result of an imbalance between free radicals and antioxidant defense system. The aim of this study was to evaluate oxidative stress factors and hsCRP in patients with OLP, before and after treatment.



METHODS: In this case-control study, 25 patients with OLP, given the routine prescription of OLP, and 23 control subjects matched for gender and age, were enrolled. Serum levels of hsCRP, malondialdehyde (MDA) and Total Antioxidant Capacity (TAC) were investigated in both groups. In case group, all these factors were also reinvestigated after 14 days of getting the prescription.

RESULTS: According to findings, serum levels of MDA was significantly higher ($P = 0.009$) and TAC was significantly lower ($P < 0.001$) in patients. There were no significant differences between serum levels of these factors and severity and duration of the disease. There were no significant differences between serum levels of TAC, hsCRP and MDA in patients with OLP before and after treatment ($P = 0.174$, $P = 0.556$ and $P = 0.194$, respectively). However, the difference in serum levels of TAC between erosive and atrophic patients (after treatment) and keratotic patients was significantly lower ($P = 0.024$).

CONCLUSION: Our findings suggests that OLP effects on serum levels of oxidative stress factors in comparison with control group. In a way that MDA increased and TAC decreased. However, according to this study treatment of OLP did not have any effect on serum levels of oxidative stress factors.

KEYWORDS: Oral lichen planus, Oxidative stress, hsCRP, Treatment.

The Evaluation of causes of delay in diagnosis and treatment of head and neck cancers

*Maryam Amirchahmaghi DDS, MSc¹, Pegah Mosannen Mozafari DDS, MSc², Leila Vazifeh Mostaan MD³,
Azar Fani Pakdel MD⁴, Siavash Zahed Anaraki MD⁴, Ana Eskandari DDS⁵*

¹ Associate Professor, Oral and Maxillofacial Diseases Research Center, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Assistant Professor, Oral and Maxillofacial Diseases Research center, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

³ Assistant Professor, Department of Otolaryngology, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

⁴ Assistant Professor, Department of Radiology-Oncology, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
⁵ Dentist

Email: amirchahmaghim@mums.ac.ir

Abstract

BACKGROUND AND AIM: Head and neck cancers are among common cancers in the world and also Iran. Early diagnosis is the most important factor for improving survival in cancer patients. The aim of present study is to evaluate the factors that potentially delays the diagnosis of head and neck cancer in three Centers in Mashhad city.

METHODS: One hundred-forty three head and neck cancer from three cancer Centers were interviewed between 2011 and 2012 in Mashhad city. Data obtained from interview and from Medical profile were entered to a checklist and analyzed using Chi-Square, compare means and Correlation tests.

RESULTS: Mean ages of patients was 51.52 ± 18.3 . Fifty eight percent of patients were male. The total time from patients' first sign or symptoms to doctor visit was 161.86 ± 38.14 days. 86.7% of patients have visited a doctor after 1 month. The mean time for the result of biopsy was 4.03 ± 4.22 days. The time between first presentations to biopsy results was 1-3 weeks in 30.8% and 3 < weeks in 69.2%. Low education, lower income, addiction, and living in rural areas (compared with urban areas) have delayed the diagnosis.

CONCLUSION: The total time from patients' first sign or symptoms to doctor visit is comparably high in Mashhadian head and neck cancer patients. Also doctors and laboratory were blamed in diagnosis delay to some extent. To lower the delay, we suggest increasing people general knowledge about cancer.

KEYWORDS: Diagnosis, Treatment, Head and neck cancer.



Medical risk assessment in patients referred to Mashhad dental clinics (2011-12)

*Maryam Amirchaghmaghi DDS, MSc¹, Atessa Pakfetrat DDS, MSc¹, Zahra Shafii DDS²,
Pegah Mosannen Mozafari DDS, MSc³*

¹ Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

² Dentist, Mashhad, Iran

³ Assistant Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

Email: amirchakhmaghim@mums.ac.ir

Abstract

BACKGROUND AND AIM: The advances in medical technology, greater access to medical facilities and better socio-economic conditions enable people to live longer as evidenced by an increase in the life expectancy in many parts of the world. These improvements are also reflected in better oral health in a number of patients since they still retain their natural teeth into the old age .as a consequence, dentists are expected to encounter a greater number of patients, especially the elderly.as the proportion of the elderly in the population continues to increase, there will be more patients with medically compromised conditions. When dentists have a chance to treat these patients, there are concerns that they should be aware of such as the effect of medical problems and their treatments on dental treatment plans, the dental or oral soft tissue problems that can arise in these patients and the effect of dental treatments on their medical conditions. This study focuses on the detection prevalence and assessment of risk related of medically compromised of dental school Mashhad patients population.

METHODS: All patients who attended university dental unit, dental office and clinics of Mashhad completed the questionnaire which assessed the frequency of medical problems. This questionnaire was the EMRRH which designed for dental station. At the same time demographic information were also recorded: sex, age, occupation and location. The patients were classified according to the ASA risk-score system, which was modified for dental treatment. The data were analyzed by SPSS and chi-square and Ratio test used for analyzed.

RESULTS: A total number of 1188 patients were registered. The average age of the patients was 38/37 years; 62/3 % women and 34/1% men; and there were 3% rural and 97% urban areas. Within this of 1188 patients; 73/3 % had medical risk related histories. Among the diverse conditions the highest percentage was medications and lowest percentage was hemophilia. Among the diverse drugs the highest percentage was painkillers. 29/2 % at medically compromised patients was in 2-3 decades. 26/7% of the patients were classified as risk ASAI; 37/3 % as ASAI; 16/9 % as ASAI; and 19/1 % as ASAIV.

CONCLUSION: Because the prevalence of medically compromised condition in dental patients is very high, dentists should bear in mind that some of the patients may harbor such conditions which are contraindicated for certain dental procedures or medication or require special attention when treating these patients. Therefore, a thorough history taking and careful clinical examinations are mandatory before commencing any dental treatment.

KEYWORDS: Risk Assessment, Health status, Patient's classification, Systemic diseases, Dentistry.

Unusual generalized inflammatory gingival enlargement associated with unilateral aggressive periodontitis

Mohaddaseh Arabsolghar DDS, MSc¹

¹ Assistant Professor, Department of Periodontology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: m_arab_s@yahoo.com

Abstract

BACKGROUND AND AIM: An unusual case of idiopathic gingival enlargement associated with unilateral aggressive periodontitis is reported. Until now there are a few case reports in which idiopathic gingival enlargement and aggressive



periodontitis are diagnosed in combination but in none of them unilateral aggressive periodontitis was seen. A 25-year-old female was referred with the chief complaint of swelling of the gingiva in the regions of right upper and lower jaws, for the past 7 years. No relevant medical or family history was recorded. There was not any local or environmental factor. On physical examination generalized diffused enlargement of gingiva was observed. Radiographs showed unilateral advanced destruction of supporting bone in right upper and lower sextants. The histological analysis of excisional biopsy revealed hyperparakeratinized epithelium. Enormous distribution of inflammatory cells was seen in subepithelial tissue. There was large parallel collagen bundles associated with inflammatory cells in the connective tissue. The exact cause of this disease is unclear. Rapid attachment loss and bone destruction, lack of inflammation despite very deep pocket and inconsistency of microbial deposits amount with disease severity in a female patient under 30 years of age lead us to diagnose aggressive periodontitis that in this rare case is unilateral. There are a few case reports that have been seen gingival enlargement associated with generalized bone loss but the combination of gingival fibromatosis and unilateral aggressive periodontitis in this rare case can be a kind of syndromic form that is uncommon in gingival fibromatosis. There is little information in this area.

KEYWORDS: Gingival fibromatosis, Aggressive periodontitis, Unilateral bone loss.

Gingival depigmentation by erbium: YAG laser: A case report

Mohaddeseh Arabsolghar DDS, MSc¹

¹ Assistant Professor, Department of Periodontology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: m_arab_s@yahoo.com

Abstract

BACKGROUND AND AIM: Gingival hyperpigmentation is mostly caused by the physiologic deposition of melanin by melanocytes. In "gummy smile" patients, melanin gingival hyperpigmentation causes an esthetic problem. Gingival depigmentation has been carried out using non-surgical and surgical procedures. For depigmentation of gingiva different treatment modalities have been reported like- Bur abrasion, scraping, partial thickness flap, cryotherapy, electrosurgery and Recently, laser ablation has been recognized as a most effective, pleasant and reliable technique. A 40 years old female reported with complain of having dark-brown gingival hyperpigmentation. Laser ablation was performed by an erbium-doped: yttrium, aluminum, and garnet (Er: YAG) laser with using local anesthesia. Patient was evaluated a month after completion of treatment. In our patient, no discomfort, pain, or bleeding complications were found during 7 days postoperatively. Achieved results were satisfactory for patient and the practitioner. The depigmentation of melanin hyperpigmented gingiva by the Er: YAG laser is a reliable and satisfactory procedure. Esthetic results were satisfactory for patients and the operator. The esthetic results were pleasing and healing was uneventful and required no supportive therapy. Since the erbium: YAG laser is available in the dental office, it seems to be the laser of choice for this procedure.

KEYWORDS: Gingival depigmentation, Erbium: YAG laser.

Treatment of sialorrhea with Botox injection

Rana Ataran DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran
Email: rana.ataran@gmail.com

Abstract

BACKGROUND AND AIM: Botulinum is a bacterial toxin which inhibits the release of acetylcholine in neuromuscular junctions. The same mechanism is used in the elimination of skin wrinkles. One of the first manifestations of botulism (botulinum poisoning) is hyposalivation. With regard to neural anti-inflammatory and vascular modulation properties,



nowadays Botox injection is considered as a potential alternative in the treatment of Sialorrhea. There are several studies which researched the inhibitory effect of botulinum injection on sialorrhea. However, the precise dosage and proper injection technique have not been investigated systematically yet; its utilization has been accepted as a convenient and practical treatment modality for sialorrhea. Clinical studies are concentrated mostly on parotid glands than submandibular, and the most significant finding with Botox injections is decrease of drooling severity. Except of intracutaneous injections for patients who suffer from Frey's syndrome, the other therapeutic interventions are precutaneous (either intarparanchymal or prelesional). Some authors prefer to employ EMG to control the injection site accuracy; authors would rather ultrasonography as an effective guidance. There are rare side effects for toxin injection, and the most unwanted result is brief potency duration of toxin which lasts 3 to 4 months approximately.

KEYWORDS: Treatment, Sialorrhea, Botox, Injection.

Effect of micafungin on biofilm of *Candida dubliniensis* isolated from oral cavity of HIV-infected patients

Sayed Amin Ayatollahi Mousavi PhD¹, Abdol Hasan Kazemi PhD², Ali Zarei Mahmoodabadi PhD³

¹ Associate Professor, Department of Medicine Mycology, School of Medicine, Kerman University of Medical Sciences, Kerman, Iran

² Associate Professor, Department of Medicine Mycology, School of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran

³ Professor, Department of Medicine Mycology, School of Medicine, Ahvaz University of Medical Sciences, Ahvaz, Iran

Email: aminayatollahi@kmu.ac.ir

Abstract

BACKGROUND AND AIM: *Candida dubliniensis* is an opportunistic yeast that has been recently implicated in oropharyngeal candidiasis in human immunodeficiency virus-infected patients. Cells within the biofilm communities display a phenotype resistant to antimicrobials and host defenses, so biofilm-associated infections are difficult to treat, representing a source of reinfections. The present study evaluated the effect of Micafungin on the biofilm formation capacity of *C. dubliniensis* isolated from the oral cavity of HIV-infected patients.

METHODS: MICs were determined using broth microdilution according to the CLSI reference method M27-A2 (3). RPMI 1640 was used as the test medium, and we used the MIC endpoint of prominent growth reduction at 24 h.

RESULTS: We determined the MICs of micafungin against 120 human immunodeficiency virus-infected patients of Nystatin & fluconazole-resistant. Micafungin had good in vitro activity against the drug-resistant *C. dubliniensis*. tested; the MICs at which 50% (MIC(50)) and 90% (MIC(90)) of isolates were inhibited were 0.03 microg/ml and 0.06 microg/ml, respectively. The drug-resistant *C. dubliniensis* was inhibited at a micafungin MIC that was ≤ 1 microg/ml.

CONCLUSION: The new echinocandin, micafungin has excellent in vitro activity against HIV-positive isolates of Nystatin & fluconazole-resistant. Micafungin may prove useful in the treatment of oral infections due to Nystatin & Fluconazole-resistant *Candida*.

KEYWORDS: *Candida dubliniensis*, HIV/AIDS, Biofilm, Oral candidiasis.

Guideline on Dental Management of Pediatric Patients Receiving Chemotherapy, Hematopoietic Cell Transplantation, and/or Radiation

Saranaz Azari Marhabi DDS, MSc¹, Somayeh Alirezai DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Qom University of Medical Sciences, Qom, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran

Email: saranazazari@yahoo.com

Abstract

BACKGROUND AND AIM: The American Academy of Pediatric Dentistry (AAPD) recognizes that the pediatric dental



Iranian Association of Oral Medicine 2014 Meeting and First National Congress on Orofacial Pain Kerman, Iran

15-17 October 2014



professional plays an important role in the diagnosis, prevention, stabilization, and treatment of oral and dental problems that can compromise the child's quality of life before, during, and after cancer treatment. Dental intervention with certain modifications must be done promptly and efficiently, with attention to the patient's medical history, treatment protocol, and health status. A multidisciplinary approach involving oncologists, nurses, social workers, dieticians, dentists and other related health professionals is essential in caring for the child before, during and after any cancer therapy. The oral cavity is highly susceptible to the effects of chemotherapy and radiation and is the most frequently documented source of sepsis in the immunosuppressed cancer patient. For these reasons, early and definitive dental intervention, including comprehensive oral hygiene measures, reduces the risk for oral and associated systemic complications. This guideline is an update of the previous document adopted in 1986 and last revised in 2008. One hundred thirty three papers were chosen for review from this list and from the references within selected articles. Dental and oral care before the initiation of cancer therapy, during cancer therapy and after treatment have been described which could increase quality of life of patients.

KEYWORDS: Chemotherapy, Hematopoietic cell transplantation, Radiation, Oral cavity.

Adjunctive techniques for oral cancer examination and lesion diagnosis

Saranaz Azari Marhabi DDS, MSc¹, Somayeh Alirezai DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Qom University of Medical Sciences, Qom, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran
Email: saranazari@yahoo.com

Abstract

BACKGROUND AND AIM: Adjunctive techniques that may facilitate the early detection of oral premalignant and malignant lesions (OPML) have emerged in the past decades. The authors undertook a systematic review of the English literature to evaluate the effectiveness of toluidine blue (TB), VEL scope, brush biopsy. They abstracted data relating to study design, sampling and characteristics of the study group, interventions, reported outcomes, and diagnostic accuracy of adjunctive aids from 23 articles meeting inclusion and exclusion criteria, including availability of histologic outcomes. The largest evidence base was for TB. A limited number of studies was available for ViziLite, ViziLite Plus with TBlue and OralCDx. Studies of VEL scope have been conducted primarily to assess the margins of lesions in known OPML. There is evidence that TB is effective as a diagnostic adjunct for use in high-risk populations and suspicious mucosal lesions. Overall, there is insufficient evidence to support or refute the use of visually based examination adjuncts.

KEYWORDS: Oral cancer, Oral SCC, Toluidine blue (TB), VELscope, Vizilite.

The usage of diode laser in surgery of oral soft tissue lesions

Ehsan Azma DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Guilan University of Medical Sciences, Guilan, Iran
Email: ehsanazma@yahoo.com

Abstract

BACKGROUND AND AIM: Many different laser have been used in the course of oral and maxillofacial surgery, in this matter the specific advantages of lasers are incision of tissues, coagulation during operation and postoperative benefits. Diode laser have a wavelength between 805-980 nm. they can be used as continuous or pulsed mode of operation and contact and noncontact with tissues according to clinical approach and treatment. The relatively new semiconductor diode lasers (GaAs, GaAlAs) are portable compact surgical units with efficient and reliable benefits, the advantages of lasers include somewhat or no bleeding during and postoperative surgery, coagulation and no need to suture with minimal swelling and scarring and decrease pain and post operative infection after laser surgery in comparison to surgery and the healing of the wound create with diode laser is desirable and without scar. We were used diode laser



(Giga; 810 nm, 400µm fiber diameter, 1.5W) for two patient in order to excision of exophytic lesion and remove pigmentation of diffuse pigmented gingiva and observed desirable result in comparison surgery. Diode laser provide benefit to dental patients and professional and also very useful in surgical dental procedures.

KEYWORDS: Diode laser, Surgery, Oral soft tissue lesions.

Temporomandibular disorders: knowledge, attitude and practice among dentists in Tehran, Iran

Maryam Baharvand DDS, MSc¹, Mina Hamian DDS, MSc², Elnaz Jalali Moghaddam DDS³

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Qom University of Medical Sciences, Qom, Iran

³ Postgraduate Student in Radiology

Email: hamian.mina@gmail.com

Abstract

BACKGROUND AND AIM: Temporomandibular disorders (TMD) account for the most common orofacial pains rising from musculoskeletal origin. The aim of this study was to investigate the level of knowledge, attitudes and practice of dental practitioners regarding TMD in Tehran, Iran.

METHODS: A questionnaire, containing 29 questions on etiology, signs and symptoms, diagnosis and treatment of TMD, was given to 200 randomly selected general dental practitioners and specialists as well as 11 TMD ex-perts.

RESULTS: An overall response rate of 97% was achieved among participants (mean age: 39 ± 8.2 years old; mean years in practice: 11.5 ± 7.4). The mean score of knowledge of TMD was found to be 10.85 ± 2.54 (of a total of 23). TMD specialists were significantly more knowledgeable than general dental practitioners ($P < 0.05$). With respect to attitude, there was a significant difference among various age groups, and by increasing age and years in practice, the attitude towards TMD had weakened. However, no significant difference was recorded between general dental practitioners' attitude and that of TMD experts towards TMD. There was a positive correlation between subjects' knowledge and attitude ($P = 0.007$, $r = 0.138$).

CONCLUSION: According to the results, the level of knowledge and attitude of general dental practitioners of Tehran regarding TMD is not desirable. The majority are not willing to admit and treat TMD patients.

KEYWORDS: Dentist, Attitude, Knowledge, Practice, Temporomandibular disorders.

Prevalence of temporomandibular disorders and it's related factors

Samira Basir Shabastari DDS, MSc¹, Iman Shirin Bak DDS, MSc², Eshagh Lasemi DDS, MSc³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Zanjan University of Medical Sciences, Zanjan, Iran

² Assistant Professor, Department of Oral and Maxillofacial Surgery, School of Dentistry, Zanjan University of Medical Sciences, Zanjan, Iran

³ Associated Professor, Deptment of Oral and Maxillofacial Surgery, School of Dentistry, Tehran Islamic Azad University, Tehran, Iran
Email: samira_bsh2@yahoo.com

Abstract

BACKGROUND AND AIM: Since different factors are effective in high spreading of TMD this study was conducted to determine the prevalence of TMD and related factors in patients referring to dental school of Azad University of Tehran.

METHODS: This descriptive-analytical study was conducted on 261 patients referred to the faculty of Dentistry of Azad university of Tehran. All samples were evaluated through three frameworks. The data were statistically analyzed by chi-square test.



RESULTS: The average age of the samples was 34 ± 12.4 . Eighty nine samples were suffering from TMD. The prevalence of TMD was 34/1%. All related factors under the study (age-sex-parafuction habits-trauma-orthodontics-anxiety and depression) showed significant correlation with TMD ($P < 0.05$), while among TMD and occlusion (Angle classification), no significant correlation was observed.

CONCLUSION: The frequency of TMD was almost high. Among All related factors except for the occlusion, there was a significant relationship. Considering the recognized complications of this disease, it is recommended to study the etiology.

KEYWORDS: Temporomandibular disorders (TMD), Related factors to TMD, Prevalence.

Effect of omega3 on mucositis in patients receiving chemotherapy in Kerman hospitals in 1390-1391 (a clinical trial-a double blind)

Samaneh Bazregari DDS, MSc¹, Maryam Alsadat Hashemipour DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Hormozgan University of Medical Sciences, Bandar Abbas, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: samaneh_15043@yahoo.com

Abstract

BACKGROUND AND AIM: Oral mucositis is a frequent complication of mucotoxic cancer therapy, causing significant oral pain, increased infection risk, and impaired functioning. The efficacy and safety of omega-3 was evaluated for the prevention and treatment of oral mucositis in patients undergoing chemotherapy in Kerman Hospitals.

METHODS: The present work is a randomized clinical trial - double blind study. Sixty patient developing World Health Organization (WHO) grade 1 oral mucositis during a chemotherapy cycle were randomized to omega-3 ($n = 30$) or placebo ($n = 30$). Mucositis was assessed according to the World Health Organization (WHO), Radiation Therapy Oncology Group (RTOG), Western Consortium for Cancer Nursing Research (WCCNR) and Oral Mucositis Weekly Questionnaire at baseline, first week during chemotherapy, and twice and third weekly until the mucositis resolved. Statistical analysis of the data was done using McNemar Test, Cochran-Martel-Haenszel Test, Wilcoxon Signed Ranks Test and SPSS13.5 program.

RESULTS: Compared with placebo, omega-3 significantly reduced the incidence of clinically Oral Mucositis. There were differences in the severity of mucositis between the omega-3 and placebo-treated groups in first, second, third weeks of treatment based on WHO ($P = 0.001$, $P = 0.0001$, 0.0001 respectively). Also, this study showed that patients in the omega-3 group had less pain during the in first, second, third weeks of treatment ($P = 0.001$, $P = 0.002$, 0.0001 respectively).

CONCLUSION: Omega-3 is safe and effective for preventing and treating oral mucositis in patients receiving mucotoxic cancer chemotherapy.

KEYWORDS: Oral mucositis, Omega-3, Cancer, Chemotherapy.

Study of dental students' knowledge on the appropriate prescription of antibiotic prophylaxis to prevent infective endocarditis in Shahid Sadoughi University of Medical Sciences, Yazd 2013-2014

Mona Bazazzadeh DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Yazd University of Medical Sciences, Yazd, Iran

Email: mbazazzadeh@yahoo.com

Abstract

BACKGROUND AND AIM: Infective endocarditis (IE) is a rare and fatal disease which is developed by oral tion between



dental treatment and IE incidence has been to some extent demonstrated, the apprmicrobial flora and sometimes causes damage to the heart valves or endocarditis. Since an associaopriate prescription of the type of required drug is important for prophylaxis against IE to decrease this disease incidence. This study was conducted to study dental students' knowledge on the appropriate prescription of antibiotic prophylaxis to prevent IE in ShahidSadoughi University of Medical Sciences, Yazd in 2013-2014.

METHODS: This cross-sectional study was conducted on 129 fourth to sixth year students in Faculty of Dentistry, ShahidSadoughi University of Medical Sciences, Yazd per descriptive-analytical method from September 23, 2013 to March 20, 2014. The samples were enrolled by census sampling method. The standard questionnaire used comprised 15 knowledge questions on the appropriate prescription of EI antibiotic prophylaxis and was filled out by the students as self-administered after they were given information on the research purposes. The obtained data were analyzed by SPSS 17 using descriptive statistical tests, Mann-Whitney, Kruskal-Wallis, and Spearman Correlation Coefficient.

RESULTS: In this study, 65.9% (85) students were female and 34.1% (44) were male. 69.6% of the sixth year students, 67.14% of the fifth year students, and 62.12% of the fourth year students had knowledge on the appropriate prescription of antibiotic prophylaxis, with no significant difference among the three groups ($P = 0.61$). Also, no statistically significant difference was observed between the students' knowledge and gender ($P = 0.15$). On the association between knowledge level and the students' grade point average (GPA), a significant association was reported between the increased knowledge and high GPA ($P = 0.001$).

CONCLUSION: In view of the findings of this study, the highest knowledge on the appropriate prescription of antibiotic prophylaxis was seen in the sixth year students and the process of antibiotic prophylaxis should be trained in the students' working environment. These trainings need to be conducted per the guideline to decrease the risk of IE in the patients.

KEYWORDS: Knowledge, Endocarditis, Antibiotic prophylaxis, Dental students.

Effects of mucoadhesive paste of chlorhexidine and betamethasone on oral ulcer recovery process in rats

Roya Borna DDS¹, Maryam Alsadat Hashemipour DDS, MSc², Zohreh Mihankhah³

¹ Postgraduate Student, Department of Pediatric Dentistry, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Dental Student, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: zmihankhah@yahoo.com

Abstract

BACKGROUND AND AIM: Ulcers are one of the most frequent conditions affecting the oral cavity. The aim of this study was to assess the effects of chlorhexidine and betamethasone on oral mucosa wound healing in rats.

METHODS: In this study, adult male rats were used in 5 groups ($n=16$ per group): B: bethamethasone; CHX: chlorhexidine; BC: betamethasone and chlorhexidine; C: control (no drugs); BB: blank). A wound measuring 2 mm in diameter was punched into the hard palate of each rat. A mucosal defect measuring 2 mm in diameter and 0.2 mm in wall thickness was made to the depth of the periosteum in the palate with a round stainless steel blade designed for punch biopsy. For topical application, a swab was soaked in materials and packed into the wound. The control group was not treated. Histological samples were harvested on post-injury days of 2, 4, 6, and 8.

RESULTS: Comparison of clinical size of wound showed that groups B and BC have the greatest reduction in wound size on days 4, 6 and 8, which was significantly different from the other groups. This study showed a lower count of mononuclear cells in group CB on days 6 and 8 compared to other groups. Groups B and BC showed the highest fibroblast counts at all the intervals, with significant differences between the groups ($P < 0.05$).

CONCLUSION: The results of this study showed the best wound healing processes from clinical and histological aspects in the betamethasone and betamethasone-chlorhexidine groups. Chlorhexidine alone had no significant effect on wound healing and was not an effective drug alone.

KEYWORDS: Ulcer, Mouth, Wound healing, Betamethasone, Chlorhexidine, Mucoadhesive.



Prevalence of musculoskeletal disorders among dentists in Kerman, Iran

Goli Chamani DDS, MSc¹, Mohammad Reza Zarei DDS, MSc¹, Nasim Khage Dalooei²,
Alireza Sarhaddi², Akram Momenzadeh³, Hosein Safizadeh PhD⁴, Maryam Rad DDS, MSc⁵,
Arezo Alahyari DDS⁶

¹ Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Dental Student, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Department of Occupational Medicine, Kerman University of Medical Sciences, Kerman, Iran

⁴ Associate Professor, Department of Community Medicine, Kerman University of Medical Sciences, Kerman, Iran

⁵ Specialist of Oral Medicine, Kerman, Iran

⁶ Dentist, Kermanshah, Iran

Email: nasindalooei@yahoo.com

Abstract

BACKGROUND AND AIM: The dental profession exposes dentists to many burdensome and harmful factors, such as the irrational posture adopted by dentists while working that causes discomfort and disorders of the musculoskeletal system. The aim of the present study was the evaluation of prevalence of musculoskeletal disorders [MSDs] among dentists in Kerman, Iran.

METHODS: In this study, MSDs of 110 dentists and a control group of 110 office workers were studied by means of a standardized Nordic questionnaire. Data were assessed by SPSS 15 and chi-square and Fisher exact tests. $P < 0.05$ was considered significant.

RESULTS: Neck symptoms were reported in 46.4 percent of dentists and 24.5 percent of office workers, with neck and elbow symptoms significantly higher among dentists [$P < 0.001$, $P < 0.01$, respectively]. The prevalence of wrist, low back, and shoulder symptoms during the last 12 months among dentists was 33.8, 28.8, and 27.5 percent, respectively. No significant differences in reported symptoms were found when considering age, years of work, hours of practice per day, and handedness among dentists.

CONCLUSION: Our results showed that further attention should be directed toward identifying risk factors that cause MSDs among dentists. Knowledge about the scope of ergonomics and prophylaxis, as well as health and safety measures at the work place, should be imparted professionally during undergraduate training and perfected in various forms during postgraduate training.

KEYWORDS: Prevalence, Musculoskeletal disorders, Dentists, Kerman, Occupational health problems.

Assessment of the Effect of Mucoadhesive Paste of Pomegranate on Recurrent Aphthous Stomatitis

Goli Chamani DDS, MSc¹, Mohammad Reza Zarei DDS, MSc¹, Mitra Mehrabani PhD², Khadijeh Rahimi DDS, MSc³

¹ Associate Professor, Department of Oral Medicine and Orofacial Pain, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Professor, Department of Pharmacognosy, School of Pharmacy, Kerman University of Medical Sciences, Kerman, Iran

³ Specialist of Oral Medicine, Department of Continuing Medical Education, Kerman University of Medical Sciences, Kerman, Iran
Email: kh_rahimi2003@yahoo.com

Abstract

BACKGROUND AND AIM: The main goal of treatment of recurrent aphthous stomatitis is to relieve pain and reduce the frequency of recurrences. The purpose of this study was assessment of the effect of mucoadhesive paste of pomegranate on recurrent aphthous ulcerations.



METHODS: The sweet and sour pomegranate juice in equal proportions was developed. Pomegranate juice has been prepared by machine and then dried concentration of 5% was added to the dough base. The study was a blind clinical trial. Forty six patients with RAS composed the study group and were examined according to pre-established criteria. The patients were put into two groups. One group received paste with drug and the other one received mucoadhesive paste without drug. Patients applied the paste three times a day from the first premonitory signs of RAS appearance. All patients on days zero, first, sixth and tenth, were examined. The large diameter of the wound was measured and recorded by a periodontal probe. Pain intensity was also calculated using VAS scores. The subjects were asked to record the intensity of pain every day. The data were analyzed by spss18.

RESULTS: The experimental group consisted of 5 men (25%) and 15 women (75%) and the control group consisted of 6 men (30%) and 14 women (70%) respectively. The average age of participants in two groups was 23 years. There was no significant difference between two groups regarding the size of the ulcer and its changes over time ($P = 0.893$). There was a decrease in pain over time in both groups, but in the sixth and tenth days, mean pain intensity in intervention group had significant decreases.

CONCLUSION: Use of mucoadhesive paste of pomegranate can reduce pain of RAS but is not effective to reduce the size of ulcer or duration of ulcer healing.

KEYWORDS: Oral ulcer, Recurrent aphthous stomatitis, Pomegranate.

The effect of saffron crocin and safranal on cultured oral squamous cell carcinoma

*Zohreh Dalirsani DDS, MSc¹, Zahra Delavarian DDS, MSc¹, Fatemeh Mosaffa PhD²,
Raheleh Jabini PhD²*

¹ Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Assistant Professor, Department of Pharmaceutical Biotechnology, School of Pharmacy, Mashhad University of Medical Sciences, Iran

Email: dalirsaniz@mums.ac.ir

Abstract

BACKGROUND AND AIM: Oral squamous cell carcinoma is the most common malignancy of oral cavity. Some studies proved anti-tumoral effect of natural components. The aim of this study was to determine the efficacy of saffron crocin and safranal on cultured oral squamous cell carcinoma.

METHODS: NIH Swiss mouse embryo contact – inhibited cells (NIH/3T3) and Human oral epidermoid carcinoma cells (KB) were propagated in Dulbecco's Modified Eagles Medium and RPMI 1640 respectively. Cell viability was measured by the MTT assay. To assay apoptosis, a flow cytometric analysis using propidium iodide (PI) was performed. Cells which were less intensively stained than G1 cells (sub-G1 cells) in flow cytometric histograms were considered apoptotic cells.

RESULTS: Concentrations ranging from 0.05-1 mM for crocin and 0.05- 0.2 mM for safranal at 72h decreased viability of KB cells, however had less effect on viability of NIH/3T3 cells. Safranal increased apoptosis in tumor cells more than normal cells. Safranal had a more apoptotic effect than crocin.

CONCLUSION: Safranal and crocin caused a decrease in tumor cell capacity. Safranal increased apoptosis in tumor cells more than normal cells. Safranal and crocin have an inhibitory effect on squamous cell carcinoma cells (in vitro).

KEYWORDS: Safranal, Crocin, Saffron, Head and Neck, Squamous cell carcinoma.



Low level laser therapy for management of myofacial pain dysfunction syndrome and temporomandibular joint disorder

*Zohreh Dalirsani DDS, MSc¹, Seyyed Amir Seyyedi DDS, MSc², Maryam Aamirchaghmaghi DDS, MSc¹,
Pegah Mosannen Mozaffari DDS, MSc³*

¹ Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Urmia University of Medical Sciences, Urmia, Iran

³ Assistant Professor, Department of Oral Medicine, Dental Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

Email: dalirsaniz@mums.ac.ir

Abstract

BACKGROUND AND AIM: Myofacial pain dysfunction syndrome is the most common reason for pain and limited function of the masticatory system. Laser therapy causes some beneficial effects on pain relief. The effect of low-level laser therapy (LLLT) for controlling the discomfort and pain has been investigated. A search about laser therapy was done in Medline/Pub Med with key words "low level laser therapy" and "Myofacial pain dysfunction syndrome" and the results of articles were collected. Studies about the effects of LLLT in patients with myofacial pain dysfunction syndrome have revealed that active and passive maximum mouth opening, lateral motion and number of tender points were significantly improved. Also, LLLT decreases tenderness to palpation of the muscles and pressure pain threshold. Several types of low-level laser therapy including HeNe, GaAIs and NdYAG and GaAs were effective in pain release and mandibular movement improvement. Laser therapy may affect many cellular and sub-cellular processes. A cascade of downstream metabolic effects lead to a reduction in inflammatory markers including prostaglandin E₂, interleukin 1 β and tumor necrosis factor α and cause analgesia. Laser induces an analgesic effect by inhibition of A-delta and C fiber transmission. Repeated treatments lead to a reduction in central sensitization. LLLT can modulate inflammatory processes in a dose-dependent manner. LLLT have been used in the treatment of myofacial pain, facial myalgia, temporomandibular joint disorders and chronic neck pain. It seems that LLLT can be considered as an alternative physical modality in treatment of chronic pain.

KEYWORDS: Low Level Laser, Myofacial pain dysfunction syndrome, Temporomandibular Joint Disorder.

Comparative investigation of Matrix Metallo Proteinases 2,9 (MMP-2,9) levels in saliva and serum of patients with head and neck squamous cell carcinoma (HNSCC) and healthy subjects

*Zohreh Dalirsani DDS, MSc¹, Atessa Pakfetrat DDS, MSc², Zahra Delavarian DDS, MSc¹,
Seyyed Eshagh Hashemi MD³, Marzieh Abdollah Nejad MD³*

¹ Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Associate Professor, Department of Oral Medicine, Dental Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

³ Assistant Professor, Department of Clinical Biochemical, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
Email: dalirsaniz@mums.ac.ir

Abstract

BACKGROUND AND AIM: Head and neck cancer is the sixth leading cancer worldwide and because most patients are diagnosed in late stages, survival rate has not improved significantly, so early detection plays an important role in improvement of prognosis. Nowadays, researchers get more attention to detection of molecular marker in body fluids especially in saliva samples. Importance of Matrix Metalloproteinases (MMPs) in invasion and metastasis of cancers has been established. The purpose of the study was to compare the serum and saliva level of MMP-2, 9 in squamous



cell carcinoma patients with healthy group and determine the correlation between serum and saliva level of each marker, and determine the correlation of these markers with clinical and histopathological parameters.

METHODS: Twenty patients with head and neck SCC and twenty healthy controls were included in the study voluntarily. Serum and saliva concentration of MMP-2,9 were measured with Quantitative Sandwich Enzyme Immunoassay Technique.

RESULTS: Serum level of MMP-9 in patients group was significantly higher than healthy group, but the difference between mean salivary level of MMP-9 in two groups was not significant. There was direct correlation between salivary level of MMP-9 and tumor grade. There was no significant difference among the study groups regarding to serum and salivary MMP-2. There was direct relationship between salivary and serum level of both markers in patients group, but not in controls.

CONCLUSION: The mean level of MMP-9 was higher in serum of patients group than the controls. Considering a few studies more studies on the current topic are recommended.

KEYWORDS: Matrix Metallo Proteinase-2,9, Saliva, Serum, Head and Neck, Squamous cell carcinoma.

Orofacial Granulomatosis (OFG)

Mehdi Davarmanesh DDS, MSc¹, Khadijeh Hajian DDS²

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

² Postgraduate Student, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran
Email: khadijeh.hajian@gmail.com

Abstract

BACKGROUND AND AIM: One of the most challenging causes of orofacial swelling manifested as orofacial granulomatosis. OFG is presence of persistent enlargement of the soft tissue of the oral and maxillofacial region characterized by non-caseating granulomatous inflammation in the absence of diagnosable systemic disease. Crohn's disease, Sarcoidosis, Allergic angioedema, Mieschke's cheilitis, Melkersson Rosenthal syndrome and tuberculosis have clinical features similar to orofacial granulomatosis. Genetic, hypersensitivity to food and dental material, microbiologic and immunologic factors are considered to have contribution in OFG. Spontaneous remission is rare. Elimination of diet, uses of corticosteroids, clofazimine, thalidomide, topical tacrolimus and anti TNF- α -agent have been used for management of the disease.

KEYWORDS: Orofacial, Granulomatosis, Management.

Histological evaluation of wound healing process after photodynamic therapy in rat oral mucosa

Parviz Deihimi DDS, MSc¹, Heidar Khademi DDS, MSc¹, Reza Birang DDS, MSc², Mohammad Akhoondzadeh DDS, MSc³

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

² Associate Professor, Department of Periodontology, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

³ Assistant Professor, Department of Oral Medicine, School of Dentistry, Bushehr University of Medical Sciences, Bushehr, Iran
Email: dr.akhoondzadeh@gmail.com

Abstract

BACKGROUND AND AIM: When the body defense is compromised, wounds can act as a route for entrance and colonization of microorganisms in the body. Photodynamic therapy with methylene blue is known as a promising antimicrobial modality. The aim of the present study was to investigate the effects of this procedure on wound healing processes.



METHODS: 48 male Wistar rats were employed in this study. Experimental wounds were surgically applied on their buccal mucosa. Then the samples were divided into 3 groups of 16 rats based on the treatment which would receive as: control, laser therapy, photodynamic therapy (PDT) mediated methylene blue. Treatment procedure was done in days 1-4 and 6-9. After sacrificing on 2, 4, 7 and 14-day follow-ups, the wounds' microscopic stage of healing on each interval, observed in cases of each group were compared according to a histological grading criteria.

RESULTS: A qualitative result was obtained as follows: on day 2 of follow up a healing promotion was observed in PDT group. At day of 4 intervals no difference was seen in healing stage between groups. However at day 7 animals corresponded to laser showed a lesser repair degree compared to the other two. Likewise, on day 14 of experiment, both PDT and laser groups showed lesser degree of healing grade than that of control group. Statistical analysis showed no difference ($P = 0/129$) in healing grades between treatment groups and control group.

CONCLUSION: This study qualitatively showed that PDT mediated methylene blue would have an inhibitory effect on healing process on day 14 after wound creature.

KEYWORDS: Laser, Methylene blue, Photodynamic therapy, Wound healing.

Effect of Low-level laser therapy on myofacial pain dysfunction syndrome

*Nastaran Donyadideh DDS¹, Sayyed Omid Mahdavi DDS, MSc², Mohammad Sadegh Rajabi DDS¹,
Pezhman Shamshiri DDS¹*

¹ Postgraduate Student, Department of Oral Medicine, School of Dentistry, Shahid Sadoghi University of Medical Sciences, Yazd, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Shiraz, Iran

Email: n.donyadide@gmail.com

Abstract

BACKGROUND AND AIM: Effect of Low-level laser therapy on myofacial pain dysfunction syndrome Syndrome Abstract: Myofacial pain dysfunction syndrome (MPDS) is the most common reason for pain and limited function of the masticatory system. LLLs are a group of lasers with power less than 250 mw that have no effect on tissue temperature. These lasers can reduce pain and inflammatory mediators, so they can be useful for decrease pain in MPDS. The effects of low-level lasers (LLLs) for controlling the discomfort of patients are investigated frequently. This article reviews effect of LLLs and its success range on improvement of MPDS.

KEYWORDS: Low power laser, Myofacial pain dysfunctional syndrome, Laser.

Use of vaccines containing human DNA as a novel approach in the treatment of oral Melanoma cancer in dogs

Somayeh Doostmohammadi PhD¹

¹ Assistant Professor, Department of Animal Science, Payame Noor Universtiy, Tehran, Iran

Email: doostmohammadi@pnu.ac.ir

Abstract

BACKGROUND AND AIM: Melanoma is a cancer of the melanocytes. The most common site for melanoma tumors to occur in the dog is in the mouth. Recent technological advancements have allowed the development of a DNA-based vaccine as a treatment option for canine oral melanoma. This form of treatment is called immunotherapy. This vaccine contains the human DNA sequence encoding a protein only found within melanocytes called tyrosinase. Once injected into the dog, the human DNA segment is processed so the dog's body actually generates small amounts of the human tyrosinase protein. This human protein is recognized by the dog's immune system as foreign. Subsequently, the dog's



immune system will destroy it. The human tyrosinase protein is similar to the dog's own natural tyrosinase protein, so the dog's immune system will destroy the tyrosinase that is present in its own melanoma cells. The end result is destruction of the tyrosinase in the cancerous melanoma cells, and ultimately, the inability of the tumor cells to survive. The melanoma vaccine contains the DNA sequences of human and stimulates the dog's own immune system to destroy tumor cells. The canine melanoma vaccine represents an exciting new technological advancement within the field of veterinary medicine. Not only can we see benefits for our canine patients, but information from results of studies with dogs treated with this vaccine are being used to help generate new treatments for people with melanoma.

KEYWORDS: Vaccines, Human DNA, Treatment, Oral Melanoma.

Study of Zoonotic agents cause oral ulcers common between humans and dogs and investigation of the likelihood of transmission to the owners

Somayeh Doostmohammadi PhD¹

¹ Assistant Professor, Department of Animal Science, Payame Noor University, Tehran, Iran
Email: doostmohammadi@pnu.ac.ir

Abstract

BACKGROUND AND AIM: Oral ulcers are the most common oral lesions in humans and their causes are very different from a simple injury to malignancies, such as squamous cell carcinoma. Since the main cause of oral disorders in dogs are also mouth ulcers, in present study the causes of oral zoonoses lesions between humans and dogs have been investigated to evaluate the probability of incidence of oral ulcers in owners of domestic dogs.

METHODS: In this research the causes of oral ulcers in humans and dogs were studied. The most common zoonotic agent between humans and dogs is the fungus *Candida albicans*, which causes thrush of the mouth (oral thrush) or oropharyngeal candidiasis. The fungus lives at a very detailed level in human and dog oral cavities in normal conditions.

RESULTS: When the immune system is weakened, the fungus grows and causes painful white lesions on the tongue and oral cavity. In this study the numbers of 10 dogs with oral cavity lesions referred to the Veterinary Clinic, Faculty of Veterinary Medicine, Shahid Bahonar University of Kerman were studied. A total of 2 of the dogs were suffering from oral thrush. These dogs had been weakened immune system because of canine distemper.

CONCLUSION: Based on studies done on dogs referred to veterinary clinics, 20% were suffering from oral thrush which is zoonosis between humans and dogs. Based on studies, owners of immunosuppressed dogs due to a primary disease are at greater risk of oral thrush. Because the fungus of oral thrush is zoonosis between man and dog, and if an immunocompromised dog is involved the likelihood of transmission to the owner can increase.

KEYWORDS: Zoonotic agents, Oral ulcer, Human.

Odontogenic and nonodontogenic pain: a diagnostic challenge disorders

Hossein Eslami DDS, MSc¹, Tahmooreh Abdollahian DDS, MSc¹, Solmaz Pourzare Mehrbani DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran
Email: solmaz_pourzare@yahoo.com

Abstract

BACKGROUND AND AIM: It is common for pain in the orofacial region to be mistaken for a toothache, and similarly, other pains of the head and neck to mimic odontogenic pain. Therefore, orofacial pain may pose a diagnostic dilemma for the dental practitioner. One of the most challenging and rewarding aspects of general practice is the diagnosis and treatment of pain. An estimated 22% of the general population experiences orofacial pain in any given 6-month period.



Furthermore, persistent and chronic pain is more prevalent in the head and neck region than in any other part of the body. Misdiagnosis of orofacial pain is common. The convergence of sensory neurons to higher centres makes localization and interpretation of pain symptoms difficult. Myofacial, neurovascular, sinus and cardiac structures can all be the source of referred dental pain, frustrating the diagnostic efforts of the general practitioner. The purpose of this article is to: a) Provide the dental practitioner with an understanding of pain etiology to consider when developing differential diagnoses for orofacial pains, and b) review various types of non-odontogenic pains which may be mistaken for a tooth ache.

KEYWORDS: Odontogenic, Nonodontogenic, Pain.

How are odontogenic infections best managed?

Hossein Eslami DDS, MSc¹, Tahmoores Abdollahian DDS, MSc¹, Solmaz Pourzare Mehrbani DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran
Email: solmaz_pourzare@yahoo.com

Abstract

BACKGROUND AND AIM: Dental infections, including gingivitis, periodontitis, dental caries and odontogenic infections, result in numerous dental visits each year in World. They can range in severity from a mild buccal space infection to a severe life-threatening multi-space infection. All dentists should be comfortable with prompt diagnosis and management of these types of infections. This review of odontogenic infections describes causative organisms, management including appropriate antibiotic selection and the indications for referral to a specialist. The most common species of bacteria isolated in odontogenic infections are the anaerobic gram-positive cocci *Streptococcus milleri* group and *Peptostreptococcus*. Anaerobic gram-negative rods, such as *Bacteroides* (*Prevotella*) also play an important role. Anaerobic gram-negative cocci and anaerobic gram-positive rods have little effect. Odontogenic infections progress through 3 stages: inoculation, cellulitis and abscess. Bacteria gain entrance to the surrounding facial spaces by direct extension from the periapical region of the involved tooth. The pattern of spread is predictable depending on the relationship between the point of attachment of the adjacent muscle and the tooth apex. Odontogenic infections are polymicrobial in nature. Prompt diagnosis and treatment, including elimination of the causative factor, are crucial to their successful management. Antibiotics are a useful adjunct in the treatment of odontogenic infections, but should not replace removal of the causative factor. All dentists should know when referral to a specialist is warranted. Penicillin in conjunction with metronidazole provides excellent bacterial coverage for most odontogenic infections and should be considered the antibiotic of choice. Clindamycin also provides excellent coverage and should be used for the penicillin-allergic patient or in the setting of penicillin failure.

KEYWORDS: Odontogenic, Infections, Management.

Investigation of expression human kallikrein type 3,4,8,10,11 and cyclooxygenase 1-2 enzyme in benign and malignant salivary gland tumors

Fatemesadat Fattah DDS, MSc¹, Maryam Alsadat Hashemipour DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: yona_8787@yahoo.com

Abstract

BACKGROUND AND AIM: Human tissue KLKs are a subfamily of serine proteases encoded by 15 genes, localized in tandem on human chromosome 19q13. COX enzymes are as regulatory enzyme in converting arachidonic acid to prostaglandins regarding the studies. The role of these enzymes is demonstrated in cancers of prostate, Breast,



oropharynx, lung, hypopharynx and skin. The aim of this study was to determine expressed KLK13,4, 8,10,11 & Cox2 in salivary gland tumors according to the type, grade, location tumors.

METHODS: In this study, 100 specimens (50 cases of malignant salivary gland tumors and 50 cases of benign salivary gland tumors) were choosing for final analysis by immunohistochemistry.

RESULTS: This study showed that expression of KLK 4, 8, 11 & 13 in benign tumors is more than normal tissues and this difference was significant. Also, expression of KLK 4, 8, 10, 11, 13 & COX2 in malignant tumors was more than normal control tissues and this difference was significant. Also, the expression of markers KLK 4, 8, 10, 11 and COX2 in malignant tumors was more than benign tumors and this difference was significant.

CONCLUSION: The differences in the levels of KLKs and COX suggest that KLKs and COX may aid in the differential diagnosis of salivary gland tumors. The coexpression of KLKs suggests their possible involvement in an enzymatic pathway activated in salivary glands. KLK 4, 8, 10, 11 and COX2 may be promising new biomarkers in salivary gland tumors.

KEYWORDS: Salivary gland tumors, KLK marker, COX2 marker.

Muscular pains as the most prevalent cause of pain in the head and neck region

Farshid Reza Forghani DDS, MSc¹, Foad Iranmanesh DDS, MSc²

¹ Assistant Professor, Department of Endodontics, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran.

² Assistant Professor, Department of Endodontics, School of Dentistry, Rafsanjan University of Medical Sciences, Rafsanjan AND Kerman University of Medical Sciences, Kerman, Iran
Email: farshidfor@yahoo.com

Abstract

BACKGROUND AND AIM: Pain of muscular origin is generally described as a continuous, deep, dull ache or as tightness or pressure. It is the most prevalent cause of pain in the head and neck region. Myospasm, myositis, and myofascial of pain will be discussed as part of this group. "Local myalgia-unclassified" includes muscle splinting, which is grouped with other muscle disorders such as delayed-onset muscle soreness or pain owing to ischemia, bruxism, or fatigue. This is because there are a few clinical characteristics that differentiate these muscle disorders from each other.

KEYWORDS: Muscular pain, Head, Neck.

T-cell lymphoblastic lymphoma in the maxilla and mandible of a child: a rare case report

Ala Ghazi DDS¹, Zohreh Dalirsani DDS, MSc²

¹ Postgraduate Student, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Associate Professor, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: ala_gh10@yahoo.com

Abstract

BACKGROUND AND AIM: A 10-year-old male child visited the Department of Oral Medicine, with previous diagnosis of abscess. The chief complaint was swelling over the both sides of the face since two months ago. Intraorally, cortical expansions were observed in the mandibular and maxillary buccal vestibules bilaterally as well as the right palatal region. The consistency of swellings on palpation was firm in the buccal vestibules and bony hard in the palate. Mobility was not detected in the associated teeth. The patient was subjected to radiographic examination including panoramic and intraoral radiographs and cone beam computed tomography. CBCT revealed a large soft tissue density lesion in the right maxillary sinus, causing erosion of medial wall of the maxillary sinus with



extending medially into the etmoid sinus. An incisional biopsy of intraoral mass was performed under local anesthesia. It was diagnosed as malignant small round cell tumor. On immunohistochemical analysis, tumor cells were positive for LCA, TDT, CD-3, CD-10 and CD-99 and negative for CK and vimentin. The diagnosis of T cell lymphoblastic lymphoma was made. The patient was referred to the department of pediatric oncology. The patient received six cycles of chemotherapy. Follow-up data show that he has been in complete remission of T-LBL for approximately 2 years from initial diagnosis and treatment. Early diagnosis of lesions in the maxilla or mandible is one of the responsibilities of oral physicians, who can, along with other health professionals, help patients to overcome the many challenges of malignant diseases.

KEYWORDS: Lymphoma, T cell, Children.

Basic Mechanisms and medical treatment of facial nerve paralysis – presentation of reported cases of paralysis following dental procedures

Zahra Golestannejad DDS, MSc¹, Heidar Khademi DDS, MSc², Hazhir Yousefshahi³

¹ Assistant Professor, Dental Implant Research Center, Department of Oral Medicine, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran.

² Associate Professor, Dental Implant Research Center, Department of Oral Medicine, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran.

³ Dental Student, Research Center, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran
Email: dr_zgolestan@yahoo.com

Abstract

BACKGROUND AND AIM: Facial nerve paralysis (Bell's palsy) is acute paralysis of VII nerve (facial nerve) without any clear cause that tends to disability of controlling muscle in involving side. Bell's palsy including two types: central and peripheral. In central type cerebrospinal part of the nerve and in peripheral type, peripheral branches of the nerve are involved. Main reason of the paralysis is not distinguished yet. Reactivation of herpes zoster or varicella zoster viruses, demyelination of the nerve, vasospasm around the nerve and trauma are the mechanisms that considered as the reason of this illness. Relation between dental procedures and this illness has been discussed so that many cases of Bell's palsy have been reported following dental procedures. In all cases anesthesia injection was contain adrenalin and appearance of signs were immediately after treatment is applying steroid medicines. Antiviral medicines like acyclovir and Valacyclovir has been prescribed. Combination of antiviral and steroids has been suggested. The of this study is evaluating facial nerve paralysis and presentation of reported cases following dental procedures , probably mechanisms involved in this procedure , diagnosis steps, differential diagnosis between peripheral and central type and evaluating the new protocols and guides that presented in 2013.

KEYWORDS: Treatment, Facial nerve paralysis, Paralysis, Dental procedures.

Imaging of Temporomandibular joint

Jahangir Haghani DDS, MSc¹, Molouk Torabi DDS, MSc²

¹ Associate Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Associate Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: j-haghani@kmu.ac.ir

Abstract

BACKGROUND AND AIM: Patient with oromaxillofacial pain especial in T.M.J and ais function problem T.M.J disorders



(TMDS). Constitute a large group this review on diagnostic T.M.J imaging will focus on joint abnormalities that may be contributing factors to patient symptomatology including some differential diagnoses T.M.J finding in asymptomatic volunteers are reviewed for comparison. Certain types of disk displacement and osteoarthritis are common intra-articular conditions that.

METHODS: Occur almost exclusively in TMD patients. These conditions may have accompanying inflammatory alterations joint effusion, condylar marrow abnormalities and intra-articular soft tissue changes.

RESULTS: There is no doubt that a proportion of T.M.D patients has severe intra-articular pathology that is not seen in asymptomatic volunteers. However, it has been difficult to consistently relate a specific image manifestation to joint pain.

CONCLUSION: It is clear that a proportion of TMD patients has disk displacement similar to those found in asymptomatic volunteers in patients who have an intra-articular condition as well as a clinically diagnosed masticatory muscle disorder, follow-up imaging studies might be helpful for management.

KEYWORDS: T.M.J, TMD.S, Pain T.M.J.

MRI and CBCT images in TMJ degenerative disorders

Jahangir Haghani DDS, MSc¹, Molouk Torabi DDS, MSc²

¹ Associate Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Associate Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: j-haghani@kmu.ac.ir

Abstract

BACKGROUND AND AIM: Temporomandibular joint is the only bilateral joint of the body which is not only affected by different pathologic and congenital conditions but also emotional and psychological factors. Degenerative disorders of Tm. Joint are the most common pathologic disorders of TMJ, presenting as Osteoarthritis, which is more common amongst women. It presents clinical and paraclinical signs in TMJ, most notably, flattening of the articular surface, decrease in articular space, irreversible disc dislocation and etc. Osteoarthritis is an age-related disease as progression and severity of condylar and articular fossa changes increase with age. The most important and accurate method for reaching the final diagnosis of this disorder is interpretation of MRI and CBCT images by an Oral and maxillofacial radiologist. Early diagnosis and treatment plan recommendations are possible through this method.

KEYWORDS: MRI, CBCT, TMJ.

Manifestation of advanced primary lymphoma in oral cavity

Afshin Haraji DDS, MSc¹, Somayeh Alirezai DDS, MSc²

¹ Associate Professor, Department of Oral and Maxillofacial Surgery, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran
Email: dr.somayehalirezai@gmail.com

Abstract

BACKGROUND AND AIM: The incidence of head and neck NHL has increased in the last few years. The incidence increases with age and generally older adults are involved. Furthermore, the incidence of oral lesions as the first



presentation of a systemic lymphoma also seems to be increasing. Study of Vander Waal et al., on 40 of primary extranodal NHL of the oral cavity, showed that the mean age of developing the disease was 59 years (3 - 88 years) and male gender was more commonly involved. In their study, in 66% of the cases, the lesion arose from soft tissues, and 77% of these were seen in the upper jaw. The most common site involved in oral cavity was also showed to be palate and gingiva. In, Shah GH et al study on 15 cases of isolated primary extranodal lymphoma of the oral cavity; they reported the upper gingivo buccal complex as the most common site of involvement. Guevara-Canales et al. in a systematic review of studies and a total 714 patients, reported that the most frequent intra-oral location was gingiva, followed by palate. Many studies have shown that primary oral lymphomas present with a soft to firm soft tissue mass which is usually non-tender and may or may not be ulcerated. This lesion can mimic periodontal or apical abscesses. Bony lesions, however, often present with low grade pain which can mimic a toothache making the diagnosis difficult. Radiographically, these bony lesions appear very similar to osteomyelitis or other malignancies creating even more difficulty in diagnosis. Studies have also shown that jaw involvement by NHL is rare, but among jaw lesions, maxilla is more frequently involved than mandible.

KEYWORDS: Manifestation, Lymphoma, Oral cavity.

Evaluation of serum isoprostane in patients with oral lichen planus (OLP)

Seyyed Eshagh Hashemi PhD¹, Atessa Pakfetrat DDS, MSc², Fereshteh Jahed Keyhani³, Banafsheh Alirezaie³,
Shideh Gharai³, Sanaz Karghozar³, Samaneh Vasigh³

¹ Assistant Professor, Department of Biochemistry, Addiction Research Center, School of medicine, Mashhad University of Medical Sciences, Mashhad, Iran

² Associate Professor, Department of Oral Medicine, Dental Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

³ Dental Student, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: alirezaeib881@mums.ac.ir

Abstract

BACKGROUND AND AIM: Lichen planus is a chronic inflammatory disease. It is one of the most common dermatological conditions involving the oral cavity. Free radicals and reactive oxygen species (ROS) play important roles in OLP. Isoprostanes which show oxidative stress are formed by free-radical mediated lipid peroxidation of arachidonic acid and cell membrane phospholipids. In this study we measured the serum level of isoprostane in OLP patients which suffers from erosive and keratotic forms, and compared it with the control healthy group.

METHODS: The study was carried out in the Department of Oral Medicine and Diagnosis, Faculty of dentistry, Mashhad University of Medical Science, Mashhad, Iran. Total of 31 patients (comprising 8 erosive, 14 atrophic, 4 erosive-atrophic and 9 keratotic of OLP) with the age range of 30-79 (46.48±11.08) were included in this study. Plasma samples were stored at -80C in the presence of 0.005% BHT until the measurement of 8-isoprostane.

RESULTS: Our result showed significant increase in the serum level of 8-isoprostane in OLP group compared with the control group. The results of T-independent test showed no significant relationship/correlation between the serum level of Isoprostane and sex, smoking or previous treatment.

CONCLUSION: The etiopathogenesis of OLP appears to be complex and interactions with genetic, environmental, and lifestyle factors are reported.

KEYWORDS: Isoprostane, Oral, Lichen planus.



Investigation of the relationship between food and the pharynx cancer in patients admitted to hospitals in Kerman (1391-1393)

Maryam Alsadat Hashemipour DDS, MSc¹, Sayed Amir Hossein Gandjalikhan Nassab²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Medical Student, School of Medicine, Kerman University of Medical Sciences, Kerman, Iran
Email: m_s_hashemipour@yahoo.com

Abstract

BACKGROUND AND AIM: Cancer is now a public health problem in all countries with class differences, cultural and economic. The aim of this study was the investigation of relation between food consumption and cancers of the pharynx in patients admitted to hospitals in Kerman (1391-1393).

METHODS: This study was a case – control study. The study population was patients who referred to oncology ward of Shafa hospital in the years 1391 to 1393. Cancers that have been studied include cancer of the lip, oral cavity, oropharynx, nasopharynx and pharynx hypopharynx that were classified according to ICD-14 to ICD 1. Case group of patients with these cancers was chosen and control group of patients in other hospital wards who were matched for age, sex, smoking, alcohol consumption and were match with the case group were selected.

RESULTS: The response rate for cases and controls was 100% and 150 case/control pairs were interviewed. The results suggest that increased protein and fat intake are related to a decreased risk of oral cancer. Carbohydrate intake, however, showed a moderate increased risk for oral cancer. Dietary fibre derived from fruits and vegetables showed a strong negative association with oral cancer risk, but fibre derived from other sources did not exhibit any protective effect. At the level of foods and food groups, increased consumption of fresh meat, chicken and liver was significantly associated with a reduction in oral cancer risk: the tests for trend were all statistically significant at the $P < 0.01$ level.

CONCLUSION: The results suggest that increased protein and fat intake are related to a decreased risk of oral cancer.

KEYWORDS: Oral cancer, Diet, Pharynx cancer.

Oral Squamous cell carcinoma: a case report

Masoud Hatami DDS¹, Abbas Javadzadeh Boluri DDS, MSc², Zahra Delavarian DDS, MSc²,
Pegah Mosannen Mozafari DDS, MSc³

¹ Postgraduate Student, Oral and Maxillofacial Disease Research Center, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Associated Professor, Oral and Maxillofacial Disease Research Center, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

³ Assistant Professor, Oral and Maxillofacial Disease Research Center, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: hatamim911@mums.ac.ir

Abstract

BACKGROUND AND AIM: Oral Squamous cell carcinoma (OSCC) is the most common malignant neoplasm of the oral cavity that accounts for more than 90% of all oral cancer usually affecting individuals over 50 years of age. The aim of this study was to report a case of squamous cell carcinoma with no history of risk factors for the development of this neoplasm. A 50 year old female, with no smoking or drinking habits with left submandibular Lymphadenopathy with 2 months history was visited. The lymph node size was about 3 cm with firm consistency and fixation to the adjacent tissues. Also a single indurated Aphthous-like ulcer in posterior left buccal mucosa adjacent to the tooth # 18 with 12 month history and a history of trauma was observed. There was not any other clinical features such as white-red plaque, verrucous surface and etc. Thus, in view of the clinical sign and symptoms and differential diagnosis of an infectious granulomatous process and malignant neoplasm, an incisional biopsy was obtained from the ulcer. The



diagnosis of staged T2N1M0 (stage III) squamous cell carcinoma was made and the patient was referred for surgical excision of the tumor and dissection of the regional lymph nodes and radiotherapy. In this instances dentists can play an important role in early detection of oral squamous cell carcinoma even with presentation of a traumatic ulcer.

KEYWORDS: Squamous cell carcinoma, Oral neoplasms, Early detection.

Treatment of trigeminal neuralgia by laser radiation

Sanaz Helli DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Ardabil University of Medical Sciences, Ardabil, Iran
Email: dr.s.helli@gmail.com

Abstract

BACKGROUND AND AIM: Trigeminal neuralgia (TN) causes severe, intermittent electric shock like pain on the face. The treatment of trigeminal neuralgia continues to be a major therapeutic challenge. Medication is often the first line of treatment. Only when medications fail or severe side effects develop, the patients are offered surgical options. Instruments with minimal power, do not permit tissue effects to any significant depth, particularly when the treated area is covered by skin. In summary, management of trigeminal neuralgia with therapeutic laser plays a better role than any other modalities of treatment. Low-level laser is mainly used for pain reduction. Because of a high receptor density in the facial skin and the very short conduction distance, LEP (laser evoked potential) recordings after trigeminal stimulation are easier and quicker than those after stimulation of the limb extremities. Trigeminal LEPs have been found absent or delayed in patients with trigeminal neuralgia. High-intensity pulses directed to any trigeminal division also elicit reflex responses. In summary Low power lasers have been used to treat trigger points, with reported success in relieving pain.

KEYWORDS: Treatment, Trigeminal neuralgia, Laser, Radiation.

Use of diode laser in frenectomy

Sanaz Helli DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Ardabil University of Medical Sciences, Ardabil, Iran
Email: dr.s.helli@gmail.com

Abstract

BACKGROUND AND AIM: Frenula consist of a mucosal fold in the labial, buccal and occasionally the lingual surface of the alveolar ridge. Their high attachment may cause orthodontic problem eg.(Diastima), prosthodontic problems eg. (Poor retention of denture), periodontic problems (gingival recession and inflammation) and speech problem (tongue tied in lingual frenum). The removal of frenum could be done by surgical excision using scalpel through different techniques eg. (Vertical, Z plasty and hemostat). Modern technology now offers an alternative mode of treatment like laser surgery. Using Diode laser energy of 1.83J/second gave best dry field (no bleeding) with good cutting efficiency and decreased post operative complications. While bleeding in conventional method (scalpel) obscure the operative field and increases the fear of surgery especially in children and patients with bleeding disorders. As a result of the ability to perform the treatment without inflicting pain, it is an essentially stress free procedure for both the patient and the clinician. There is no postoperative pain, the patient dose not require a prescription for analgesic, unlike conventional way, where there is postoperative pain due to damaging effect of scalpel, suturing, edema and swelling. One of the mechanisms suggested for the associated reduction in scarring is the slightly prolonged healing time while healing in conventional surgery is faster. In summary dry and bloodless field during operation, no post operative swelling, no pain or discomfort, with normal healing process are benefits of laser application.

KEYWORDS: Diode Laser, Frenectomy.



Immunopathogenesis of oral lichen planus

Sanaz Helli DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Ardabil University of Medical Sciences, Ardabil, Iran
Email: dr.s.helli@gmail.com

Abstract

BACKGROUND AND AIM: Lichen planus (LP) is an idiopathic inflammatory disease of the skin and mucous membranes, characterized by an autoimmune attack on the epidermis by skin-infiltrating T cells. Autoaggressive T cells could be activated *in vivo* to cause epidermal damage; memory T cells specific for a previously encountered agent could cross-react with other antigens, including contact allergens, drugs and viruses. Cytokines produced by both lymphocytes and keratinocytes which influence the local immune response could promote chronicity. Accordingly, modulation of immunologic events is a potential therapeutic approach for LP. Results: Both antigen-specific and non-specific mechanisms may be involved in the pathogenesis of oral lichen planus. Antigen-specific mechanisms include antigen presentation by basal keratinocytes and antigen-specific keratinocyte killing by cytotoxic T-cells. Non-specific mechanisms include mast cell degranulation and matrix metalloproteinase activation in OLP lesions. These mechanisms may combine to cause T-cell accumulation in the superficial lamina propria, basement membrane disruption, intra-epithelial T-cell migration, and keratinocyte apoptosis. OLP chronicity may be due to deficient antigen-specific TGF-beta1-mediated immunosuppression. The normal oral mucosa may be an immune privileged site and breakdown of immune privilege could result in OLP and possibly other autoimmune oral mucosal diseases. Carcinogenesis in OLP may be regulated by the integrated signal from various tumor inhibitors (TGF-beta 1, TNF-alpha, IFN-gamma, IL-12). Interleukin-18, a proinflammatory cytokine, induces T-helper 1 differentiation and cytotoxic T-lymphocyte functions, both of which have been proposed in the pathogenesis of oral lichen planus.

KEYWORDS: Immunopathogenesis, Oral, Lichen planus.

Dentine hypersensitivity

Foad Iranmanesh DDS, MSc¹, Farshid Reza Forghani DDS, MSc²

¹ Assistant Professor, Department of Endodontics, School of Dentistry, Rafsanjan University of Medical Sciences, Rafsanjan, Iran

² Assistant Professor, Department of Endodontics, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: foad.iranmanesh@gmail.com

Abstract

BACKGROUND AND AIM: Dentine hypersensitivity is a common oral pain condition affecting many individuals. It is an exaggerated response to a sensory stimulus that usually causes no response in a normal healthy tooth. It remains a worldwide under-reported and under-managed problem, despite making some dental treatments more stressful than necessary and having a negative impact on the patient's quality of life. The etiology is multifactorial; however, over recent years the importance of erosion has become more evident. The management of tooth hypersensitivity by oral healthcare professionals requires an appreciation of the complexity of the problem together with knowledge of available treatments. Many efficacious treatment regimens are now available, in particular a number of over-the-counter home use products. The basic principles of treatment are altering fluid flow in the dentinal tubules with tubule occlusion or modifying or chemically blocking the pulpal nerve. However these treatments can be expensive and their effects are often transient. Future therapies could be based upon either laser or iontophoresis techniques.

KEYWORDS: Dentine hypersensitivity, Pain, Etiology.



Xerostomia: etiology, oral manifestation and treatment

Noushin Jalayer Naderi DDS, MSc¹, Farid Abassi DDS, MSc²

¹ Associate Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Shahed University, Tehran, Iran

² Associate Professor, Department of Oral Medicine, School of Dentistry, Shahed University, Tehran, Iran

Email: jalayer@shahed.ac.ir

Abstract

BACKGROUND AND AIM: Xerostomia is a challenging condition for patients and usually causes the treatment request. This condition accompany with some complications. Dentist has to recognize the etiology of xerostomia and treat it properly. The aim was to study the etiology, oral manifestation and treatment of xerostomia. The study was review of literature. All researches from 1995 to 2013 in different dentistry and medical sites were studied and data based on the aim were recorded. Besides the Sjögren's syndrome and radiotherapy as identified causes of xerostomia, some drugs is also related to this condition. Determination of the incidence rate of xerostomia in relation to drugs is impossible. Drugs with extensive systemic effect have more outcomes on xerostomia. Hemodialysis and diabetes mellitus are other causes of dry mouth. Burning sensation, altered taste, dysphasia, redness and fissure of mucosa are oral manifestation of this condition. The treatment is palliative. Establishing the measures for preventing of tooth decay and candidiasis is also most important. Correct diagnosis of xerostomia is the most important responsibility of dentist. Xerostomia encompass some complications that has adverse effect on patient's quality of life. The treatment is palliative and aimed to prevention of others complication.

KEYWORDS: Xerostomia, Oral manifestation, Treatment.

Prognostic and predictive clinical, pathological and molecular markers for oral squamous cell carcinoma: review of articles

Mahsa Kalantari DDS, MSc¹, Molouk Torabi DDS, MSc², Parisa Kalantari DDS³

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Associate Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman, Iran

³ Dentist, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: kalantary.mahsa@yahoo.com

Abstract

BACKGROUND AND AIM: Head and neck squamous cell carcinoma (HNSCC) is the fifth most common cancer worldwide. HNSCC involves the upper aerodigestive tract and can destroy the structure and function of organs involved in speech, taste, smell and hearing, as well as vital structures necessary for survival. HNSCC has long been a treatment challenge because of the high rate of recurrences and of advanced disease at the time of diagnosis. Despite aggressive and multidisciplinary treatment approaches, including chemotherapy and/or radiotherapy with reconstructive surgery, there has been no significant improvement in 5-year survival over the past 20 years. Several prognostic and predictive clinical, pathological and molecular factors have been introduced for HNSCC. We herein review some of the prognostic factors including: 1- demographic factors 2-tumor stage and nodal status 3-tumor thickness 4-pathological grade 5-pattern of infiltration 6-perineural infiltration 7-excision margins 8-HPV infection 9-genetic mechanisms in several pathways such as signaling pathways, cell cycle/apoptosis, cell adhesion, cell motility and invasion, angiogenesis, immortalization and inflammation. Recent studies have provided an insight into the understanding of the molecular pathogenesis of the disease and exploring the novel therapies.

KEYWORDS: Oral squamous cell carcinoma, Prognosis, Tumor markers.



Ameloblastic fibro-odontoma: A case report and review of the literature

Mahsa Kalantari DDS, MSc¹, Parisa Kalantari DDS²

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Dentist, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: kalantary.mahsa@yahoo.com

Abstract

BACKGROUND AND AIM: Ameloblastic fibro-odontoma (AFO) is a rare, mixed odontogenic tumor usually occurs in children and young adults with no gender predominance. Mandibular posterior region is usually involved and a painless swelling is the most common clinical feature. We here report a case of AFO in a 12-year-old girl with the complaint of a painful expansive posterior right mandibular lesion. Radiographic examination showed an ill-defined radiolucency containing radiopaque materials. The second molar was displaced by the lesion. Enucleating surgery was conducted and no recurrence was observed after 2 years follow-up. AFO is a benign expansive jaw lesion which develops in children. To treat AFO, proper surgical excision and curettage should be performed.

KEYWORDS: Ameloblastic fibro-odontoma, Odontogenic tumors, Benign jaw lesion.

Evaluation of mast cell in Oral SCC in according to staging and grading

Foruz Keshani DDS, MSc¹, Sahar Rahrovan², Fereshteh Aslanbeigi², Vahid Saeidian DDS³

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran

² Dental Student, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran

³ Dentist, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran
Email: kforuz@yahoo.com

Abstract

BACKGROUND AND AIM: Oral SCC is a malignant neoplasm which occurs in the oral mucosal epithelium. Mast cells show many role in reducing the number of extracellular matrix, angiogenesis, and innate and acquired immune responses. The role of angiogenesis in cancer progression is no secret for nobody. The aim of this study was to investigate the relationship between the degree of differentiation of these cells in SCC and the possible use of them in order to select a chemotherapy drug and evaluate the response to treatment in patients with oral SCC and some other Clinical and pathologic factors.

METHODS: This cross-sectional study was done on 30 patients with primary oral SCC who have been previously untreated and were underwent surgery at cancer institute of Imam Khomeini Hospital in Tehran. Thus, by oral and maxillofacial surger, the cancer Stage was recorded and a sample of cancer was sent to the pathology laboratory. Samples were Graded and then stained Toluidine Blue. The slides were evaluated by a pathologist in the 5 field in High Power Field (HPF) and the average density of mast cells was recorded. Data were analyzed by Chi-Square test.

RESULTS: Of 30 patients, 43.3% was male and 56.7% was female. The average age of patients was 66.6 ± 8.83 years. The most frequent age group was 69-60 years with a frequency of 35%. In the present study, the significant correlation was obtained between mast cell density with patients age and disease stage. However, there was no significant correlation between mast cell density and sex of patients and disease grading.

CONCLUSION: Based on the results of this study, a significant relationship was found between the presences of mast cells with SCC Stage. The presence of mast cells was decreased in low stages. This may represent the fact that the probability of mast cells in patients with SCC can be effective in improving clinical stage and possibly therapeutic drugs inhibit the proliferation of mast cells can be used to inhibit the development of SCC.

KEYWORDS: Oral SCC, Mast cell, Stage, Grading.



Diagnosis and treatment of non-dental origin dental pain

Foruz Keshani DDS, MSc¹, Zeinab Heidaripoor², Fereshteh Aslanbeigi²

¹ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran

² Dental Student, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran
Email: kforuz@yahoo.com

Abstract

BACKGROUND AND AIM: Pain is main common factor that causes the patients refer to Dental Clinic and Dentists have a duty to monitor and diagnose dental pain and other facial pain may occur. Dental pain can be divided into two general groups of dental and non-dental origin: 1. Dental pain that originates from Pulp and periradicular tissues. Dental hypersensitivity, reversible and irreversible pulpitis, apical periodontitis, acute apical abscess and periodontal abscess are in these categories. Pain felt by the patient's teeth can have a source of non-dental or recurrent from other teeth or other orofacial tissues. In this article as a review article have been attempt to study pain in the head and neck area that may be present as toothache and also diagnostic and treatment strategies be presented. In this paper, we have divided the origin of the pain into six categories: facial muscles, nerves, nervousness - cardiovascular, maxillary sinus or nasal mucosa, heart and mental. Diagnosis of non-odontogenic dental pain prevents misdiagnosis and can provide to choose appropriate treatment and if necessary refer the patient.

KEYWORDS: Diagnosis, Treatment, Dental pain, Non-dental origin.

Low level laser therapy versus pharmacotherapy in improving myofascial pain disorder syndrome

*Hamid Reza Khalighi DDS, MSc¹, Hamed Mortazavi DDS, MSc¹,
Sayyed Masood Mohahedi DDS², Somayeh Alirezaie DDS, MSc³,
Saranaz Azari Marhabi DDS, MSc⁴*

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran

² Dentist, Department of Laser, School of Dentistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran

³ Assistant Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran

⁴ Assistant Professor, Department of Oral Medicine, School of Dentistry, Qom University of Medical Sciences, Qom, Iran
Email: saranazari@yahoo.com

Abstract

BACKGROUND AND AIM: Temporomandibular disorders would lead to masticatory muscle pain, jaw movement disability and limitations in mouth opening. Pain is the chief complaint in 90% of the temporomandibular patients. Several treatment options have been introduced for TMD patients such as physical therapy, pharmacotherapy. Among which pharmacotherapy is the most common. During recent years low level therapy has been commonly used for MPDS patients but several controversies exist. Considering the analgesic and anti-inflammatory action of LLLT, the effects of LLL was compared with pharmacotherapy with naproxen in patients with MPDS.

METHODS: In this experimental before/after study 40 MPDS patients were divided into two groups. One group received naproxen 500mg bid for three weeks as treatment modality and also had placebo laser sessions. The other group received active laser (Diode 810 nm CW) as treatment factor and placebo drug. Pain intensity was measured by VAS and maximum painless mouth opening was also measured as a functional index every session and in a 2 month follow up. Data was collected and analyzed with SPSS software. Independent T-Test was used to analyze the data. P value < 0/05 was considered as significant.

RESULTS: The low level laser group had significant reduction of pain symptoms $p < 0/05$ and a significant increase in mouth opening. In naproxen group neither pain intensity nor maximum mouth opening had significant improvement.

CONCLUSION: Treatment with LLLT caused a significant improvement in mouth opening and pain intensity in patients with MPDS. Similar improvement was not observed in naproxen group.

KEYWORDS: Myofascial pain disorder syndrome, TMD, Naproxen, Low level laser therapy.



Evaluation of the effectiveness of the Iralvex gel on the recurrent aphthous stomatitis management- a clinical trial

Heidar Khademi DDS, MSc¹, Atefeh Tavangar DDS, MSc², Mohammad Reza Salehi DDS, MSc², Pedram Iranmanesh DDS³

¹ Associate Professor, Department of Oral Medicine and Dental Material Research Centre, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

² Assistant Professor, Department of Oral Medicine, Dental Material Research Centre, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

³ Dentist, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran
Email: h_khademi@dnt.mui.ac.ir

Abstract

BACKGROUND AND AIM: Recurrent aphthous stomatitis is one of the most common lesions of oral cavity. There is not a definitive treatment for this lesion. These lesions cause chew discomfort, speech disability and inadequate swallowing so most patients need symptomatic treatment. The aim of this study was to investigate the effectiveness of the Iralvex gel on the recurrent aphthous ulcer management.

METHODS: In this double-blind clinical trial study, 40 patients with recurrent aphthous stomatitis, without any remarkable systemic disease were selected. All patients signed consent form. Twenty patients (Case group) treated with the Iralvex gel and other assigned to placebo (control group). Complete healing of lesions, duration of pain and pain intensity base on Visual Analogue Scale (VAS) in the naught, first, third, fifth days evaluated. Data were analyzed with Repeated Measure ANOVA and Independent t-test using SPSS16 software.

RESULTS: The mean pain relief durations in the experimental and placebo groups were 6.10±0.29 and 8.00 ± 0.33 days respectively. Time to complete remission in the case group was 6.80 ± 0.27 days and in the control group was 10.20±0.42 days. Significant differences in intensity of pain level on the days 1, 3 and 5 (P-value ≤ 0.01), time to complete pain relief (P-value ≤ 0.001) and complete healing (P-value ≤ 0.001) were observed.

CONCLUSION: As an inexpensive herbal drug, the Iralvex gel is an effective remedy for both pain remission and healing of aphthous ulcers with no noticeable side effect.

KEYWORDS: Iralvex gel, Recurrent aphthous ulcers, Pain control, Complete remission, Visual Analogue Scale (VAS).

Antibacterial activity of milk vetch flower honey against four bacteria of human oral flora: streptococcus mutans, lactobacillus casei, lactobasillus rhamnosus and lactobasillus plantarum

Faezeh Khozeimeh DDS, MSc¹, Zahra Golestannejad DDS, MSc², Marzieh Tofighi³, Azadeh Ayen³,
Mohsen Doost Mohammadi PhD⁴, Shahin Gavanji PhD⁵, Azizollah Bakhtari PhD⁶

¹ Assistant Professor, Torabinejad Research Center, Department of Oral Medicine, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

² Assistant Professor, Dental Implant Research Center, Department of Oral Medicine, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

³ Dental Student, Torabinejad Research Center, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

⁴ Department of Biotechnology, School of Advanced Sciences and Technologies, Isfahan University of Medical Sciences, Isfahan, Iran

⁵ Young Researchers and Elite Club, Khorasgan Branch, Islamic Azad University, Khorasgan, Iran

⁶ Department of Animal Science, Isfahan University of Technology, Isfahan, Iran

Email: dr_zgolestan@yahoo.com

Abstract

BACKGROUND AND AIM: Milk vetch flower honey has valuable therapeutic effects, however, its antibacterial effect is not well understood. In present study, milk vetch flower honey was assessed for antibacterial activity against four bacterial species: Streptococcus mutans, Lactobacillus casei, Lactobasillus rhamnosus and Lactobasillus plantarum, which are the main causes of oral cavity infection.



Iranian Association of Oral Medicine 2014 Meeting and
First National Congress on Orofacial Pain Kerman, Iran

15-17 October 2014



METHODS: Honey solutions were prepared by diluting with sterile water to the final test concentrations (9.3, 18.75, 37.5, 75, 150, 300, 600 and 1200ppm) immediately before testing. Antimicrobial activity was determined by serial dilution and the disk diffusion method.

RESULTS: Although a honey concentration of 1200 ppm strongly inhibited growth of all four bacterial species, concentrations below 37.5 ppm were more efficient as antibacterials. We determined the minimum inhibitory concentrations (MIC) for honey against *S. mutans*, *L. casei*, *L. rhamnosus* and *L. plantarum* were 75, 75, 100 and 100 ppm, respectively. *S. mutans* was the most resistance species with a zone of inhibition of 6.81 millimetres (mm) while *L. casei* showed significant sensitivity with a zone of inhibition of approximately 11.3 mm.

CONCLUSION: To conclude, the reasonable antibacterial effect of milk vetch flower honey against mentioned bacteria species indicated that this type of honey could be used as a natural antibiotic, however, it need more studies for finding its effective agents.

KEYWORDS: Antibacterial, Infection, Traditional medicine.

Review of studies on effects of propolis (Honey Wax) on recurrent aphthous stomatitis

Parisa Kohani¹, Amir Abbas Shirkavand¹

¹ Dental Student, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran
Email: parisa.kohani@gmail.com

Abstract

BACKGROUND AND AIM: Recurrent aphthous ulcers and inflammation (RAS) are often painful and can cause some disruptions in oral cavity. They have no cure and prescribing systematic drugs to decrease RAS's pain & occurrence frequency, have many side effects. The purpose of this study was to investigate the effect of propolis on recurrent oral aphthous stomatitis (RAS). Propolis is a natural product derived from plant resins collected by bees. In traditional medicine, propolis has been used to treat mouth ulcers. The impact of this material on wound healing, including burn wounds & wounds caused by surgical incisions, has been proved. The study was a literature review. It was obtained by using published creditable numerous papers from search engines on the internet. Honey wax in studies, was used in various ways including capsules, chewable tablets, syrup etc. They were for a period of several weeks to several months. Currently, there is no known reason for the ulcers. Studies showed that propolis is effective in reducing the frequency of occurrence and prevalence of oral aphthous ulcers. It also improves the quality of patient's lives who suffer from RAS. Of course, all of the studies were experimental, so their results are not conclusive, and it needs to research in a larger statistical community. Overall, the results of studies showed that propolis can be impressive on oral condition improvement in patients with recurrent aphthous ulcers.

KEYWORDS: Propolis, Recurrent aphthous, RAS, Honey Wax.

Review of studies on effects of propolis (Honey Wax) on dental cavity

Parisa Kohani¹, Amir Abbas Shirkavand¹

¹ Dental Student, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran
Email: parisa.kohani@gmail.com

Abstract

BACKGROUND AND AIM: Nowadays, science is trying to find an alternative natural medicine to treat diseases and reduce the side effects on human body. Prophet Muhammad (SAW) said: "Honey has a thousand and one benefits, and can treat a thousand and one pains." Propolis is a natural product derived from plant resins collected by bees. On ancient Egypt, people used propolis to treat their mouths' ulcers. Honey wax has antifungal, antiviral, and antibacterial properties. The impact of this material on healing wounds, including burn ulcers and wounds resulted by surgical incisions has been proven. The aim of this study is to investigate documents about the effects of honey wax on oral diseases, with emphasis on its effect on dental caries. The study was a literature review. It was obtained by using published creditable numerous papers from search engines on the



internet. Ikeno et al. on their study tried to investigate the effect of propolis on bacteria, especially in relation with *Streptococcus mutans*, to prevent dental caries. In this study, it was proven that Propolis reduces dental caries in rats due to a decrease in the number of microorganisms, slowing glucan synthesis and decreases the activity of bacteria's Glycotransferase. In another study conducted, it was observed that bee products can be effective in reducing bacterial plaque, thus reduce the decay. Duarte et al. show in their article that because of high levels of fatty acids in the honey wax, the activity of *Mutans's* Acid Production and also microorganism's tolerance to low PH has been reduced; thus dental caries caused by *Streptococcus mutans* is greatly reduced. It should be noted that honey wax is not as effective as chlorhexidine gluconate in preventing caries, but has less cytotoxic effect on gingival cells (Ozan et al.). Propolis also plays a role in reducing the number of bacteria that cause gingivitis. Although we have found so many benefits of using propolis in the literature, it should be considered that its use can cause allergies in some people. According to obtained data, propolis is effective in reducing dental caries.

KEYWORDS: Propolis, Dental caries, Oral disease.

Orofacial pain in oncology patients: prevalence, etiology, differential diagnosis and management

Maryam Kuzekanani DDS, MSc¹

¹ Associate Professor, Department of Endodontics, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: maryam_30002001@yahoo.com

Abstract

BACKGROUND AND AIM: Orofacial pain in cancer patients is a common complication. It happens because of the cancer itself or because of a wide range of anti-cancer treatments such as chemotherapy & radiation therapy or both factors together. Some times this pain is very severe and doesn't relieve after administration of strong analgesic drugs. Since it intensifies through aggressive anti cancer treatments such as high dosages of administration chemotherapy drugs, it may end to the cease of the treatment itself, so this pain may be life threatening and can be a challenge for providing public health. The aim of this review of the literature paper is to describe the prevalence, etiology, physiopathology, differential diagnosis and to give some recommendations for managing this pain as much as possible.

KEYWORDS: Orofacial, Pain, Oncology patients.

Efficacy of *Zataria multiflora* Boiss., *Myrtus communis* L., *Trigonella foenum-graecum* L., *Camellia sinensis* L. and *Portulacaoleracea* on oral ulcer recovery process in rats

Sodabeh Lotfi DDS MSc¹, Adeleh Poyafard DDS², Amir Pirasteh³, Ahmad Arjmand³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Postgraduate Student, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Dental Student, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: slotfi@yahoo.com

Abstract

BACKGROUND AND AIM: Ulcers are one of the most frequent diseases affecting the oral cavity. The aim of this study is to assess the efficacy of *Zataria multiflora* Boiss., *Myrtus communis* L., *Trigonella foenum-graecum* L., *Camellia sinensis* L. and *Portulacaoleracea* on oral ulcer recovery process in rats.

METHODS: In this study, adult male rats were separated in to 7 groups (n = 12 per group) named: M (*Myrtus communis* L.), CS (*Camellia sinensis* L.), Z (*Zataria multiflora* Boiss.), T (*Trigonella foenum-graecum* L.), P (*Portulacaoleracea*), C (Control) and B (Blank). A wound (2 mm diameter) is punched into the hard palate of each rat. A mucosal defect (2 mm in diameter and 0.2 mm in wall thickness) is made to the depth of the periosteum in the palate with a round stainless steel blade designed for punch biopsy. For topical application, a



swab was soaked in materials or blank and packed into the wound. The control group was not treated. Histological samples were harvested on post injury days 2, 4, 6, &8.

RESULTS: This study showed that there were no significant differences between groups in the reduction of weight. Comparison of residual wound area showed that group M and then T have the lowest level in all groups at all the intervals. Wound Clinical examination showed gradual repair in groups M and T, and most of the lesions in these two groups were healed on the last day (8th day) with minimal central depression. The highest thickness of epithelium was observed in groups M and T on days 6 and 8, which was significantly different from other, groups at all the intervals. Groups M and T showed the highest level of fibroblast cell counts with significant difference between all groups at all the intervals.

CONCLUSION: The results of the present study showed that *Myrtuscommunis* L. and *Trigonellafoenum-graecum* L. have significant effects on oral wound healing processes in rats. These favorable results might introduce new groups of materials or medicines, which have been derived from these plants.

KEYWORDS: Ulcer, Mouth, Wound healing, *Zatariamultiflora* Boiss, *Myrtuscommunis* L., *Trigonellafoenum-graecum* L., *Camellia sinensis* L., *Portulacaoleracea*.

Burden of oral diseases in Iran, in comparison with the other countries

Tayebeh Malek Mohammadi DMD, PhD¹, Maryam Farzad DDS²

¹ Associate Professor, Department of Dental Public Health, Research Center for Social Determinant of Health, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² PhD Student, Department of Dental Public Health, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: mfarzadmoghadam@yahoo.com

Abstract

BACKGROUND AND AIM: Despite great improvements in the oral health of populations in several countries, global problems still persist. The burden of oral disease is particularly high for the disadvantaged and poor population groups in both developing and developed countries. Oral diseases such as dental caries, periodontal disease, tooth loss, oral mucosal lesions and oropharyngeal cancers, human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)-related oral disease and orodental trauma are major public health problems worldwide and poor oral health has a profound effect on general health and quality of life. The diversity in oral disease patterns and development trends across countries and regions reflects distinct risk profiles and the establishment of preventive oral health care programmes. The important role of sociobehavioural and environmental factors in oral health and disease has been shown in a large number of socioepidemiological surveys. In addition to poor living conditions, the major risk factors relate to unhealthy lifestyles (i.e. poor diet, nutrition and oral hygiene and use of tobacco and alcohol), and limited availability and accessibility of oral health services. Several oral diseases are linked to noncommunicable chronic diseases primarily because of common risk factors. Moreover, general diseases often have oral manifestations (e.g. diabetes or HIV/AIDS). Worldwide strengthening of public health programmes through the implementation of effective measures for the prevention of oral disease and promotion of oral health is urgently needed. The challenges of improving oral health are particularly great in developing countries. The studies performed in Iran, showed the difference and distribution of the oral diseases across different parts of the country. They can have an important role in directing future policy decisions and planning cost-effective strategies. Based on this, we decide to compare the burden of oral diseases in Iran to the other countries.

KEYWORDS: Burden of oral diseases, Risk factor, Iran.



Evaluation of the cytotoxic effects of Cyclooxygenase enzyme inhibitors drugs (COX1, COX2) on KB cell line in vitro

Hoda Mehrabi Zadeh DDS¹, Maryam Alsadat Hashemipoor DDS, MSc², Zohreh Mihankhah³

¹ Postgraduate Student, Department of Oral and Maxillofacial Surgery, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Dental Student, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: zmihankhah@yahoo.com

Abstract

BACKGROUND AND AIM: Today, there are many researches about more effective chemotherapy drugs with less side effects. Using of cyclooxygenase enzyme inhibitors as a drug has noticed by many investigators in recent years. The aim of this study is to investigation the cytotoxic effects cyclooxygenase enzyme inhibitors drugs on KB cell line in vitro.

METHODS: The powder of Ibuprophen, Indomethacin, Acetaminophen, Naproxen, Celecoxib, Mefenamic acid, Diclofenac Na, Aspirin and Piroxicam prepared from SIGMA Company were solved in an appropriate solvent according to the company catalog. The proliferation of KB cell line was done by MTT Assay method and concentration of drugs that causes to 50% decrease in cell growth were computed (IC50).

RESULTS: This study show that the Celecoxib, Mefenamic Acid and Diclofenac Na drugs have cytotoxicity effect on the KB cell line. The IC50 values of the extract in these drugs were 1.5, 4.5 and 15.4 µg/ml, respectively. Also, it was found that the Naproxen, Indomethacin and Aspirin drugs with mean IC50, 50µg/ml, respectively exhibit cell growth.

CONCLUSION: This study shows that the Celecoxib, Mefenamic Acid and Diclofenac Na drugs have cytotoxicity effect. Therefore, it seems that these drugs can be introduced as oral anticancer drugs in experimental study. It is evident that in order to investigate the effect of these drugs in details, more studies are needed for analyzing the mechanism of their functions.

KEYWORDS: Cytotoxic effects, Drug, KB cell line, COX1, COX2.

A Review on Oxidative Stress in Recurrent Aphthous Stomatitis

Mahsa Mehryari DDS¹, Nazanin Mortazavi DDS¹, Fatemeh Sayyadi DDS¹, Saman Mohsenitavakoli DDS¹, Shaghayegh Zahedpasha DDS¹, Seyedhadi Mortazaviamiri DDS¹, Ali Bijani², Hamed Hossein Kazemi DDS, MSc³, Mina Motallebnejad DDS, MSc⁴

¹ Postgraduate Student, Department of Oral Medicine, School of Dentistry, Babol University of Medical Sciences, Babol, Iran

² Babol University of Medical Sciences, Babol, Iran

³ Assistant Professor, Department of Oral Medicine, School of Dentistry, Babol University of Medical Sciences, Babol, Iran

⁴ Associate Professor, Department of Oral Medicine, School of Dentistry, Babol University of Medical Sciences, Babol, Iran

Email: mortazavi_nazanin@yahoo.com

Abstract

BACKGROUND AND AIM: The purpose of the present study was to review the studies regarding serological and salivary oxidant / antioxidant status in patients with recurrent aphthous stomatitis (RAS). The literature was searched using key words RAS, Antioxidants, Saliva, Hematinic(s) and Hematinic Acid in the last 10 years, particularly the recent 3 years (2010-2013). Of a total 37 clinical trials, 18 case-control articles were selected and evaluated; fulfilling the requirements as the RAS patients having at least 3 oral aphthous attack per year. The exclusion criteria included systemic as well as periodontal diseases, iron deficiency associated anemia, medication usage and smoking. Almost all lipid-peroxidation studies in serum and saliva were manifested by an increase of malondialdehyde (MDA) concentration in RAS patients compared with controls. This would indicate the role of reactive oxygen species (ROS) in the etiology of the disease. Serum trace elements (Zn, Se) were reduced and Cu was increased in RAS patients in comparison with control individuals. A decreased serum superoxide dismutase (SOD) and an increased salivary SOD were observed in



all RAS patients. Catalase (CAT) and uric acid (UA) analyses were non-inclusive. Levels of paraoxonase and arylesterase as well as antioxidant vitamins (A, E, C) were lower in RAS patients than controls.

KEYWORDS: Recurrent aphthous stomatitis, Antioxidant, Saliva, Hematinic(s), Hematinic acid.

An unusual Oral Squamous cell carcinoma of the mandible, similar to inflammatory hyperplastic lesion: A case report

*Mahsa Mehryari DDS¹, Maedeh Salehi DDS, MSc², Ali Reza Babaie Darszi DDS³, Golnar Hashemipour DDS⁴,
Hamed Hossien Kazami DDS, MSc²*

¹ Postgraduate Student, Department of Oral Medicine, School of Dentistry, Mazandaran University of Medical Sciences, Mazandaran, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Mazandaran University of Medical Sciences, Mazandaran, Iran

³ Postgraduate Student, Department of Oral and Maxillofacial Surgery, School of Dentistry, Mazandaran University of Medical Sciences, Mazandaran, Iran

⁴ Postgraduate Student, Department of Oral and Maxillofacial Pathology, School of Dentistry, Mazandaran University of Medical Sciences, Mazandaran, Iran

Email: mah.mehryari@yahoo.com

Abstract

BACKGROUND AND AIM: Squamous cell carcinoma (SCC) is the most common malignant tumors of oral cavity. The men/women ratio is about 2 to 1. Generally it is admitted that 60% of carcinoma of the mandibular gingiva are located posterior to the premolars. Gingiva is one of the less common sites of OSCC. It can easily be misdiagnosed as benign neoplasms or other inflammatory reactions due to the valuable clinical and behavioral presentations. We encountered a 76-years-old female with an unusual OSCC on the anterior mandibular ridge which mimicked inflammatory hyperplastic lesion in May 2013 with chief complaint of delision not allowing her complete denture seated. After biopsy of the lesion, the surgeon noticed that real bone resorption did not accommodate to its radiographic feature. Then histopathological evaluation reported Oral Squamous cell carcinoma (OSCC). Patient referred for CT-scan and MRI. Three months later, the lesion recurred, enlarged and extended rapidly and she was emphasized to secondary surgery as fast as possible. She were not accepted and then underwent to radiotherapy and chemotherapy. In November 2013 patient passed away because of progression of OSCC. This case reminded us to keep the possibility of OSCC in mind while examining every intra-oral lesions.

KEYWORDS: Oral Squamous cell carcinoma, Mandible, Inflammatory hyperplastic, Case report.

Oral disease is the most common medical complication

Reza Moavi¹, Sajad Rasoli², Raziye Moavi¹

¹ Radiology Student, Aja University of Medical Science, Tehran, Iran

² Prosthodontics Student, Aja University of Medical Science, Tehran, Iran

Email: sajad.rasouli2013@yahoo.com

Abstract

BACKGROUND AND AIM: Oral diseases as well as diseases of other organs were hurt humans of years before. Every year the world's most industrialized countries in the field of prevention of this disease will run public plan. People are always looking for ways to relieve and treat these diseases. This indicates the importance of oral and dental diseases in the world. The remarkable thing is that what is the most dental disease? What strategies for control and prevention of this complication are there? Have been our administrative measures in order to control these diseases?



Iranian Association of Oral Medicine 2014 Meeting and
First National Congress on Orofacial Pain Kerman, Iran

15-17 October 2014



METHODS: This paper presents an overview of the development of library and Internet searches of relevant books and articles have been used.

RESULTS: Findings from this study suggest that oral diseases, especially dental caries and disease periodontics (gum infection and the protective tissue of the teeth) are the most common diseases in the world. Many countries in the world in terms of both the individual and the collective measures for the disease has been made. Dental caries is influenced by environmental factors such as pathogenic factors relative to host factors has occurred. Each of these factors, such as genetic predisposition divide to a variety of micro-organisms and the role of saliva in caries and caries-causing materials, the sugar used in food applications, Various factors in periodontics and dental disease which are discussed in the dental plaque that we can noted to the most important as microbial. Due to advances in dental care, interventions to prevent dental caries and periodontal disease control and prevention has been studied.

CONCLUSION: According to oral disease and dental caries and most importantly periodontal diseases are the major diseases of our times. Each of these features has its own causes. On the other hand, many developed countries in the field of public control and Prevention of the disease had already been considered. In addition to the initiatives taken, to prevent such diseases, both individually and public should be educated. Practical projects in the community, with the goal of statistical differences occur.

KEYWORDS: Oral disease, Tooth decay, Periodontitis.

New therapeutic opportunities of oral mucositis

Ehsan Mohajeri PhD¹

¹ Assistant Professor, Department of Pharmaceutics, School of Pharmacy, Kerman University of Medical Sciences, Kerman, Iran
Email: ehsandaru@gmail.com

Abstract

BACKGROUND AND AIM: Oral mucositis is regularly reported and documented to be the most severe complication of chemotherapy and radiotherapy, affecting most of patients. Drugs therapy is required to minimize its clinical aggressiveness and improve the nutritional status, hydration and quality of life of the affected patients. The prevention and control of oral ulcers is crucial for cancer prognosis, since the establishment of severe lesions may lead to temporary or permanent treatment discontinuation and compromise cancer control. Although many pharmacologic interventions have been used for the prevention and treatment of oral mucositis, there is no accepted strategy for its management. Most preventive and treatment strategies are based on limited, often anecdotal, clinical data. Basic oral hygiene and comprehensive patient education are important components of care for any patient with cancer at risk for development of oral mucositis. Non pharmacologic approaches for the prevention of oral mucositis include oral Cryotherapy and low-level laser therapy for patients undergoing hematopoietic stem cell transplantation. Chlorhexidine, amifostine, hematologic growth factors, pentoxifylline, glutamine, and several other agents have all been investigated for prevention of oral mucositis. Treatment of established mucositis remains a challenge and focuses on a palliative management approach. Topical anesthetics, mixtures and mucosal coating agents have been used despite the lack of experimental evidence supporting their efficacy. Investigational agents are targeting the specific mechanisms of mucosal injury; among the most promising of these is recombinant human keratinocyte growth factor. The aim of this presentation is to review oral mucositis causes and new treatments to professional clinical dentists, in order to help minimize patient suffering.

KEYWORDS: Oral mucositis, Prevention, Treatment.



Immunohistochemical expression of OCT4 in oral squamous cell cancer, epithelial dysplasia and normal mucosa

*Azra Mohiti Ardakani DDS, MSc¹, Mahnaz Sahebamee DDS, MSc², Poriya Motahari DDS, MSc³,
Kambiz Kamyab DDS, MSc¹*

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

² Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

³ Assistant Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

Email: amohiti63@gmail.com

Abstract

BACKGROUND AND AIM: Squamous cell carcinoma is one of the most common cancer. It is associated with low survival rate. In recent studies cancer stem cell theory has been mentioned and its effect on prognosis is controversial. OCT4 is one of the transcription biomarkers and it is essential for self renew and polypotential activity of cells which may affect disease prognosis.

METHODS: OCT4 expression in 24 tissue specimens of oral SCC and 24 specimens of epithelial dysplasia and 24 specimens of normal mucosa was evaluated by immunohistochemical staining.

RESULTS: Positive OCT4 staining was seen in normal cells and the staining was cytoplasmic. Expression of OCT4 in the cancer group compared with the normal and dysplastic groups was significantly different. No correlation was seen between OCT4 expression and histological grading in the cancer group. The amount of OCT4 expression in normal cells was more than the cancer group.

CONCLUSION: Expression of OCT4 in normal cells could be related to expression of OCT4B variant and separating the variants of this marker should be considered in further research in other to get more accurate results.

KEYWORDS: OCT4, Oral cancer, Epithelial dysplasia.

Exfoliative cytology of oral mucosa in smoking, opium addict and non-smoking individuals: A cytomorphometric study

*Neda Mokhlesi¹, Mahbobeh Aghaie DDS², Maryam Alsadat Hashemipour DDS, MSc³, Toraj Reza Mirshekari MD⁴,
Majid Asadi-Shekaari PhD⁵, Seyed Amir Hossein Gandjalikhan Nassab⁶*

¹ Dental Student, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Dentist

³ Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

⁴ Assistant Professor, Department of Pathology, School of Medicine, Kerman University of Medical Sciences, Kerman, Iran

⁵ Associate Professor, Department of Histology, Member of Neuroscience Research Center, Kerman University of Medical Sciences, Kerman, Iran

⁶ Medical Student

Email: mokhlesineda@yahoo.com

Abstract

BACKGROUND AND AIM: The aim of the present study was to evaluate keratinization and nuclear and cytoplasmic changes of oral epithelial cells of smokers, opium addict and non-smoking individuals with the use of exfoliative cytology technique.

METHODS: Buccal mucosa and floor of mouth smears were collected from 300 males (100 smokers, 100 opium addicts and 100 non-smokers). The nucleus and cytoplasm sizes were determined with the use of image analysis software. Data was analyzed with Mann-Whitney test and Student's t-test using SPSS 13 statistical software. Statistical significance was defined at $P < 0.05$.



RESULTS: The results revealed statistically significant differences in cellular and nuclear size and the nuclear/cytoplasmic ratio between smokers, opium addicts and non-smokers in different age groups. The mean size of the nucleus compared to that of cytoplasm was significantly higher in smokers and opium addicts compared to non-smokers considering the age of the subjects.

CONCLUSION: The results of this study indicate different rates of keratinizing epithelial cells in oral cavity following smokers, opium addicts and non-smokers persons. Also, these results suggest a possible relation between the number of cigarettes per day, opium consumed daily and an increase rate of cellular proliferation in the oral mucosal cells. The present study showed a decrease in cellular diameter, an increase in nuclear diameter and an increase in the nuclear/cytoplasmic ratio in the smears of all the smokers and opium addicts compared to non-smokers.

KEYWORDS: Analysis, Exfoliative, Cytology, Cytoplasmic, Nuclear, Smoking, Opium.

Laugier-Hunziker syndrome: a case report

Nazanin Mortazavi DDS¹, Hamed Hossein Kazemi DDS, MSc²

¹ Postgraduate Student, Department of Oral Medicine, School of Dentistry, Babol University of Medical Sciences, Babol, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Babol University of Medical Sciences, Babol, Iran
Email: mortazavi_nazanin@yahoo.com

Abstract

BACKGROUND AND AIM: The Laugier–Hunziker syndrome (LHS) is a rare idiopathic disease that is characterized by the appearance of hyperpigmented macules with no underlying disease. Oral pigmentation are most commonly seen on the lips, buccal mucosa, hard palate, and tongue. Affected individuals may also have nail involvement presented as melanonchia striata. This disease is benign, follows a chronic course without remission and is more frequently seen in women. We present a 66-year-old non-smoker Caucasian man with conjunctival brownish pigmentation in both his eyes and no signs of nail involvement. Oral lesions consisted of multifocal, well-circumscribed, uniformly pigmented brown macules, less than 5 mm in diameter, located on the hard palate, labial and buccal mucosa. He was considered healthy with regard to his blood count, endocrinopathic and gastrointestinal investigations. Furthermore, he had neither a relevant drug history, nor a familial history of abnormal pigmentation. Histopathologic examination revealed melanin accumulation confined to the basal layer of epithelium. It is important to include this condition in the differential diagnoses of multifocal oral melanosis to prevent unnecessary clinical concern. On the basis of clinical findings and absence of systemic involvement, the diagnosis was consistent with LHS.

KEYWORDS: Laugier-Hunziker syndrome, Oral lesions, Hyperpigmented macules.

Diagnosis of none-odontogenic pains in teeth

Pegah Mosannen Mozafari DDS, MSc¹, Abbas Javadzadeh Bluori DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, Head of Oral and Maxillofacial Pain Clinic, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Pain Clinic, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: mosannenp@mums.ac.ir

Abstract

BACKGROUND AND AIM: None-odontogenic oromaxillofacial pains are misdiagnosed as a dental pain in many situations. It results in unnecessary diagnostic and therapeutic procedures which can be even harmful. Here we will review key points toward rule out dental causes and discuss general characteristics of maxillofacial pains. Due to several years experience in pain clinic and managing thousands of patients and review of relevant literature we can



present some key characteristics in each category of pains. Some characteristics may be common in multiple groups. With a precise history and exploration of pain pattern we –as specialists- can reach to a definite diagnosis .But perhaps we must not expect such diagnostic skill from a general dentist. By clarification of differential diagnosis of none odontologic pains we can avoid medical errors and lead to on-time referral of patients to qualified centers. In this context we will discuss pains with dental and periodontal, myofacial, temporomandibular, peripheral nerves, vascular, referral, psychological origins and generalized pain syndromes and simply will describe differential diagnosis of these entities. We hope this article can represent a way for proper management of patients with oral and maxillofacial pains.

KEYWORDS: Orofacial pains, Dental pain, Differential diagnosis.

Teaching essentials of compromised patient's referral: introducing standard referral letter

Pegah Mosannen Mozafari DDS, MSc¹, Atessa Pakfetrat DDS, MSc², Javid Rasekhi DDS³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Associate Professor, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

³ Postgraduate Student, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: mosannen@mums.ac.ir

Abstract

BACKGROUND AND AIM: No item has been considered in dentistry curriculum for essentials of a standard referral letter. This experimental study was planned to deal with this shortcoming.

METHODS: This study was performed on dentistry juniors of Mashhad dental school in academic year 2011-2012. A pre test was obtained from all students-writing a letter for a compromised patient with a proposed scenario. These letters was scored by a self established, validated questionnaire. Then the intervention ran and a post test was performed.

RESULTS: Forty two students were enrolled. Mean scores of pretest was 9.578 and was 24.78 fore post test. Males and females were similar except in mentioning medical history of patient. Total mean of dentistry course was not related to scores of pre/post test.

CONCLUSION: Referral letters are means for patients to easier access of medical care and at least data such as date, medical history, reason of consultation, lab tests and primary diagnosis must be mentioned in them to avoid unnecessary time consumption and to establish a good communication in medical team. We could develop or consolidate such skill in a group of students.

KEYWORDS: Referral letter, Experimental study, Research in education.

Comparison the effects of using supragingival irrigators containing water and chlorhexidine with sterilized gauze on oral health in patients with blood dyscrasia

*Pegah Mosannen Mozafari DDS, MSc¹, Mahdokht Rashed Mohasel DDS², Mohammad Mahdi Kooshyar MD³,
Abbas Javadzadeh Blouri DDS, MSc⁴, Zohreh Dalirsani DDS, MSc⁴, Parisa Karoos DDS⁵*

¹ Assistant Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Postgraduate Student, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

³ Associate Professor, Department of Hematology and Oncology, Imam Reza Hospital, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

⁴ Associate Professor, Department of Oral Medicine, Oral and Maxillofacial Diseases Research Center, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

⁵ Dentist, Mashhad, Iran

Email: mosannen@mums.ac.ir

Abstract

BACKGROUND AND AIM: Oral and dental problems are one of the potentially fatal problems in patients suffering from



blood dyscrasia that are involved with chemo and radiation therapy. The goal of this study is to assess a new approach to increase the hygiene level in these patients.

METHODS: In this random clinical trial we have selected 32 Imam Reza hospital patients, suffering from blood dyscrasia, to study the effects of supra-gingival irrigators in Oral Hygiene Index Simplified (OHI-S) compared with the use of humid sterile gauze (common protocol in hospital) in 3 weeks.

RESULTS: The Debris Index Simplified (DI-S) has 59.78% reduction in case group compared to control group but Calculus Index Simplified (CI-S) doesn't have any difference in these 3 weeks. According to these 2 indices: in case group, OHI-S was 37.5% good, 56.25% fair and 6.25% poor in the first day examined but 100% good in the last follow up. and in control group: OHI-S was 56.25% good, 37.5% fair and 6.25% poor in the first day examined but only 18.75% good in the last follow up. 75% was fair and 6.25% was poor.

CONCLUSION: According to statistical and clinical results, supragingival irrigation can decrease DI-S and increase OHI-S significantly and preserve the oral hygiene in these patients in the period of hospitalization and because of its safety that is more than tooth brushing and it's easy application for patients and nurses, it can be used as a standard protocol in hospitals.

KEYWORDS: Oral irrigator, Leukemia, Blood dyscrasia, Oral Health Index Simplified (OHI-S).

The role of oral health factors in quality of life of elderly in Babol

Mina Motallebnejad DDS, MSc¹, Nazanin Najafi DDS², Shervin Mehdizadeh DDS, MSc³, Fatemeh Sayyadi DDS⁴

¹ Associate Professor, Department of Oral Medicine, School of Dentistry, Babol University of Medical Sciences, Babol, Iran

² Dentist, Babol, Iran

³ Assistant Professor, Department of Prosthodontics, School of Dentistry, Babol University of Medical Sciences, Babol, Iran

⁴ Postgraduate Student, Department of Oral Medicine, School of Dentistry, Babol University of Medical Sciences, Babol, Iran
Email: f.sayyadi90@yahoo.com

Abstract

BACKGROUND AND AIM: Recently, the population related quality of life became a main concern. Oral health is one of the factors which influence the quality of life of elderly. Thus, the aim of this study is the role of oral health in quality of life of elderly in Babol, North of Iran.

METHODS: This cross-sectional study was carried out on 300 people older than 65 years living in Babol. Oral-health-related quality of life was investigated through the Persian version of OHIP_14 questionnaire. Data related to gender, age, job, education, the last dental visit, and the use of dentures and dental treatment needs (periodontal, endodontic, prosthetic and surgery) were collected through interview and patient examination and were, then, analyzed by SPSS 17 software (Mann-Whitney & Kruskal-Wallis tests).

RESULTS: The mean age of participants was 71.4 ± 5.6 life years, among whom 183 were male (%61) and 117 were female (%39). The mean score of OHIP was 22.4 ± 8.2 (5-50). The highest score was associated with psychological discomfort. There was not a significant difference between the OHIP scores of gender. However, the scores were significantly lower in educated people. OHIP scores were also lower among people who used dentures. Moreover, this score was found lower in dentate elderly than edentulous ones. There was no correlation between the age and OHIP score.

CONCLUSION: This study reveals that OHRQoL is moderate in Babol's aging population with oral problems.

KEYWORDS: Oral health, Quality of life, OHIP-14, Elderly.



Different options in dental management of adult patients with systemic disease and lack of cooperation

Arash Mottaghi DDS, MSc¹, Fatemeh Soheylipour DDS²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Islamic Azad University (khorasgan branch), Khorasgan, Iran.

² Postgraduate student, Department of Oral Medicine, School of Dentistry, Islamic Azad University (khorasgan branch), Khorasgan, Iran
Email: arash.mottaghi@gmail.com

Abstract

BACKGROUND AND AIM: The dental care of people with systemic disease and lack of cooperation (fear, gag, mental retardation and ...) has many problems. The maintenance of oral health by regular examination, prevention and treatment may be difficult because of the limitations in patient systemic condition. Mostly there is lack of enough concern on the importance of oral health and its effect on patient's systemic condition. Many times the diagnosis of orofacial pain may need to be discounted as a cause inefficient patient cooperation, which changes the easy treatment of tooth restoration to a complex treatment plan. In such cases the use of general anesthesia for examination and treatment would seem to be the obvious option but this strategy has limitations. This paper undertakes a focused review of sedation techniques as an alternative to general anesthesia in the treatment of people with lack of enough cooperation due to their mental behavioral or systemic condition. The use of different techniques of sedation comparing intravenous with oral or intranasal routes of sedation is compared. The techniques described proved effective and safe for use in the primary care setting.

KEYWORDS: Dental management, Patient, Systemic disease.

Prevalence of maxillofacial pain with cardiac origin in patients referred to Emam Ali hospital, Kermanshah, Iran

Hamid Reza Mozafari DDS, MSc¹, Roholah Shrifii DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran

² Assistant Professor, Department of Endodontics, School of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran
Email: rshl1357@gmail.com

Abstract

BACKGROUND AND AIM: Heart diseases are the most common diseases that cause many problems for the people. Pain caused by heart disease usually occurs in chest, right and left arm, shoulder and neck. In rare cases oral and maxillofacial pains of heart origin have been reported which affect dentists diagnose and treatment plan. The purpose of this study was to evaluate the frequency of oral and maxillofacial pain originated from heart diseases.

METHODS: In this cross-sectional study of 215 patients with angina pectoris and I that their disease was confirmed by a specialist cardiovascular disease was evaluated. 157 subjects (73/02) were male and rest of them was female. MI had 722 (89.3) patients and 23(10.7) patients with angina pectoris. Mean age \pm SD of subject's age were 61.64 ± 13.13 years. To determine oral and maxillofacial pain, if the patient clearly had a cardio vascular origin, radiography and clinical examination of the patients who had heart attacks were reported in the oral and maxillofacial.

RESULTS: Out of the 215 patients, only one case (46) oral and maxillofacial pain or a heart. When the heart attack pain has also been reported, patients showed the symptom of in other parts of the body as well. After review and oral cavity, maxillofacial area and panoramic radiographs and clinical examinations found no problem with the source maxillofacial.

CONCLUSION: Oral and maxillofacial pain in heart disease is very rare, but in some cases it can prevent misdiagnosis and unnecessary treatment and their timely referral can prevent serious risks to patients.

KEYWORDS: Angina pectoris, Myocardial infarction (MI), Oral and maxillofacial pain.



Alcohol-containing mouthwashes and oral side effects

Narges Naghsh DDS, MSc¹

¹ Assistant Professor, Department of Periodontology, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran
Email: n_naghsh@dnt.mui.ac.ir

Abstract

BACKGROUND AND AIM: In solutions for external use, as in the case of mouthwashes, alcohol has qualities both as a solvent and an antiseptic, and moreover, it has been recognised as an active preservative to 10-12 %. Use of mouthwash and an increased risk of oral cancer has been a source of controversy for decades. A MEDLINE search was done from 1991 to 2014 to evaluate the oral side effects of alcohol. Ethanol is contained in a high number of ready-to-use mouthwashes in a concentration typically between 5 - 27% Volume. Local alterations such as epithelium detachment, mucosal ulcerations, gingivitis and petechias, have been observed in people who have used mouthwashes with 25% of alcohol or more. Ethanol, both in commercialized mouthwashes and mixed with water, can cause oral pain. The strength of the pain is directly proportional to the quantity of ethanol in the mouthwash and to the duration of the rinse. Ethanol levels under 10% do not usually cause important pain sensations. Although, white lesions associated to long use of alcohol-containing mouthwashes have been observed in human oral mucosa and in laboratory animals. With the data we have, it has been impossible to establish a causative relation between mouthwash use and the development of oral cancer. In the other hand, it does not seem to be and evidence justifying the use of alcohol in mouthwashes. However, it remains clear that more epidemiological studies are needed which will have a greater focus on certain aspects of mouthwash use and the development of oral cancer.

KEYWORDS: Alcohol- containing mouthwashes, Gingivitis.

Pemphigus vulgaris in pregnancy

Narges Naghsh DDS, MSc¹

¹ Assistant Professor, Department of Periodontology, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran
Email: n_naghsh@dnt.mui.ac.ir

Abstract

BACKGROUND AND AIM: Pemphigus vulgaris (PV) is a potentially fatal autoimmune disease and has the incidence of 0.08–0.42 per 100 000. To date, there are at least 49 pregnancies reported in the literature in patients with pemphigus. An electronic search in Pubmed and Google was done to review the treatment modalities for Pemphigus vulgaris in pregnancy. 75% of these patients were treated with CS and concomitant therapies were used in 21% of these patients which consisted of azathioprine, dapson, plasma exchange and plasmapheresis. Steroid regimens used during pregnancy should be low as possible if started after the first trimester to minimize the risk of teratogenic complications and has side effects such as diabetes mellitus, myopathy, depression and delayed wound healing. Plasmapheresis is a safe treatment option and may minimize the need for glucocorticoid treatment. Side effects of plasmapheresis are mild but may include fluid-electrolyte imbalances, hypotension, citrate toxicity, and depletion of clotting factors. Of 49 pregnant women treated variably with corticosteroids, azathioprine, plasmapheresis, plasma exchange, or dapson, 45% gave birth to neonates with neonatal pemphigus, and in some of them infants were stillborn. For those patients in whom the diagnosis is made shortly after pregnancy is recognized or if the patients have existing pemphigus and become pregnant, a good treatment option is receiving one cycle of IVIg every month during the pregnancy. This monthly infusion should continue for at least 2 months post-partum to decrease the chances of post-partum flare-up. A larger group of patients treated by such a protocol would be able to provide more convincing evidences. When the pregnancies of these patients are complicated or associated with significant medical problems or disease states, use of IVIg may be considered early in the pregnancy.

KEYWORDS: Pemphigus vulgaris, Plasmapheresis.



Evaluation of prevalence of oral Aphthous ulcer in girl students of high school and preuniversity level of Yazd in the first semester of academic year 2012-2013

Fatemeh Olia DDS, MSc¹, Mohammad Hasan Akhavan Karbassi DDS, MSc¹, Saba Sabaghi DDS²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Yazd University of Medical Sciences, Yazd, Iran

² Dentist, Yazd, Iran

Email: dr.olia@ssu.ac.ir

Abstract

BACKGROUND AND AIM: Recurrent aphthous stomatitis is one of the most common lesions of the mouth that Frequent recurrence and pain these lesions can impact, on quality of life. Several related factors of recognized for aphthous ulcers same as stress, food allergy. Evaluation of aphthous ulcer prevalence leads to improve awareness of people. Therefore this study was conducted to assess prevalence of aphthous ulcer in girl students of high school and pre-university level of Yazd in the first semester of academic year 2012-2013.

METHODS: In this descriptive analytic cross-sectional study, 248 girl students were selected and studied using randomized cluster sampling from pre-university and high school level of Yazd city in academic year 2012-2013. The data were collected by observation, interviews and oral examination in the first semester exams. After data's collection, they were coded and entered into computer and were analyzed by SPSS (17) with Chi-square test.

RESULTS: Among total samples of 248, 62 persons (25%) reported history previous of oral aphthous that 51.6% of them had a positive familial history. Based on the information obtained, stress and food allergy were effective on incidence of oral aphthous.

CONCLUSION: In this study aphthous ulcer prevalence was about 25%. Stress and food allergy have a considerable impact on oral aphthous ulcer incidence. There was a significant relationship between previous oral aphthous experience and positive familial background. (P.value < 0.001) There was not a significant difference in different academic levels.

KEYWORDS: Recurrent aphthous stomatitis, Prevalence, High school, Pre university, Students.

Oral cancer: knowledge, preventive practices and opinions of dentists in Mashhad-Iran

Atessa Pakfetrat DDS, MSc¹, Javad Sarabadani DDS, MSc², Hamid Reza Motezarre DDS, MSc³

¹ Associate Professor, Maxillofacial Diseases Research Center, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Assistant Professor of Oral Medicine, Addiction Research Center, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

³ Dentist, Mashhad, Iran

Email: pakfetrata@mums.ac.ir

Abstract

BACKGROUND AND AIM: Detecting oral cancer (OC) at an early stage is the most effective means of improving survival and reducing morbidity from disease. The objective of this study was to evaluate opinions and practices, related to oral cancer prevention and early detection, of dentists in Mashhad-Iran.

METHODS: A standard questionnaire survey on 140 dentists was conducted regarding practices of primary and secondary prevention of oral cancer. Data were analyzed via SPSS software version 16.

RESULTS: A total of 89.9 of dentists ask their patients to stop smoking or using other risk factor, though only 39 percent of dentists agree or strongly agreed that they are adequately trained to help tobacco cession counseling. Dentists reported that they conducted oral cancer examination for 35.4 percent of their patients 40 years age or older on their initial appointment and



for just 11.6 percent of these patients regularly. 76.6% of dentists conducted oral cancer screening for high risk patients. Over half of dentists reported that their knowledge of on oral cancer screening was current.

CONCLUSION: The reported practices of these dentists regarding oral cancer, in conjunction with their opinion about key aspects of these practices and their training, point to a need for systematic educational updates in oral cancer prevention and early detection.

KEYWORDS: Oral cancer, Practice, Dentists, Prevention.

Expression of Epidermal growth factor receptor (EGFR) in oral Squamous cell carcinoma by immunohistochemistry technique and correlation with clinicopathologic criteria

Atessa Pakfetrat DDS, MSc¹, Zohreh Dalirsani DDS, MSc¹

¹ Associate Professor, Maxillofacial Diseases Research Center, Department of Oral Medicine, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran
Email: pakfetrata@mums.ac.ir

Abstract

BACKGROUND AND AIM: Oral squamous cell carcinoma (OSCC) is the sixth most common malignancy of human beings and the most common malignancy of oral cavity. Despite treatment advances, survival is very poor, mostly because of the risk of developing secondary malignancy. Clinical-pathologic features and molecular biomarkers might be a predictor of recurrence. One of these markers is epidermal growth factor which have shown different results in various studies. The aim of this study was to determine the expression level of EGFR in OSCC and to analyze its prognostic value in patient's survival.

METHODS: 62 Paraffin- embedded specimens of OSCC patients were selected by random and EGFR staining was performed. The data of clinical and histological parameters were extracted from the documents.

RESULTS: EGFR over expression was positive in 98.4% of cases. There was a correlation between the over expression of EGFR in tumoral and control cases, both in intensity and extent scoring .but it was statistically significant for intensity. ($P = 0.00$). No statistically significant relation was observed between EGFR and clinic pathologic parameters. There wasn't any relationship between survival and EGFR ($P = 0.652$).

CONCLUSION: Considering high expression of EGFR in squamous cell carcinoma and the role of EGFR in cell processes like proliferation, angiogenesis and differentiation of the tumor, more studies on treatments targeting EGFR and inhibiting the signaling process is recommended.

KEYWORDS: Epidermal growth factor, Oral cancer, Prognosis.

Comparison the level of pain, after using of formocresol and *Elaeagnus Angustifolia* fruit powder in pulpotomized deciduous molars

Hamid Reza Poureslami DDS, MSc¹, Fatemeh Sadat Sajadi DDS, MSc², Faezeh Madani DDS³

¹ Professor, Department of Pediatrics Dentistry, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

² Assistant Professor, Department of Pediatrics Dentistry, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Postgraduate Student, Department of Pediatrics Dentistry, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran
Email: fsajadi1234@gmail.com

Abstract

BACKGROUND AND AIM: Pulpotomy is one of the most common pulp therapy of deciduous molars. Pulpotomy with



formocresol has long-term clinical success, but concerns about its toxicity and mutagenicity have prompted researches into other alternative materials. *Elaeagnus Angustifolia* have anti-inflammatory, analgesic and coagulation effects because of its flavenoides and terpenoids. The aim of this study was to compare the level of pain, after using of formocresol and *Elaeagnus Angustifolia* fruit powder in pulpotomized deciduous molars.

METHODS: In this clinical trial study, 32 patients (6-10 years old) with two similar deciduous molars that need pulpotomy treatment have selected. These teeth randomly divided into two groups: 32 teeth in pulpotomy with formocresol group and 32 teeth in pulpotomy with *Elaeagnus Angustifolia* group. Finally the teeth have restored with SCC. Visual Analog Scale have used for assessing the level of pain during the first ten days after treatment. The data were analyzed using SPSS 18 software and repeated measures ANOVA test.

RESULTS: The results indicated that the level of pain was decreased significantly in both two groups ($P < 0.05$). Also the decrease in formocresol group was significantly more than *Elaeagnus Angostifolia* group ($P = 0.01$), however, the age ($P = 0.47$), gender ($P = 0.63$) and type of tooth ($P = 0.77$) had no effect on pain experience.

CONCLUSION: During 10 days after pulpotomy of deciduous molars with formocresol and *Elaeagnus Angustifolia* fruit powder, the level of pain was decreased in both two groups. This decreasing in level of pain in formocresol group was more than other group.

KEYWORDS: Pain, Formocresol, *Elaeagnus Angustifolia*, Pulpotomy, Deciduous molars.

Dental Implants in the Diabetic Patients

Solmaz Pourzare Mehrbani DDS, MSc¹, Hossein Eslami DDS, MSc¹, Tahmoores Abdollahian DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran
Email: solmaz_pourzare@yahoo.com

Abstract

BACKGROUND AND AIM: Dental-implant treatment is an efficient means of replacing lost teeth. However, diabetes can be considered a relative contraindication for this type of treatment because of the slightly higher failure rate compared with populations without diabetes. Implant surgery is never a matter of urgency; thus, diabetes patients with the best chances of success should be conjointly selected and prepared by both dental and diabetes clinicians. Prerequisite selection of suitable diabetic patients, eradication of co-morbidities (poor oral hygiene, cigarette-smoking, periodontitis), stabilization of glycaemic control (HbA1c around 7%) and preventative measures against infection can increase the success of dental implantation in diabetic patients to a satisfactory rate of 85-95%.

KEYWORDS: Dental Implants, Diabetic Patients.

Assessment of the prevalence recurrent aphthous stomatitis(RAS): A systematic review

Maryam Rad DDS, MSc¹, Molouk Torabi DDS, MSc²

¹ Specialist of Oral Medicine, Kerman, Iran

² Associated Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: rad_1152@yahoo.com

Abstract

BACKGROUND AND AIM: Recurrent aphthous stomatitis (RAS) is the most common inflammatory ulcerative condition of the non-keratinized areas of oral mucosa. The occurrence of RAS varies in patients' populations depending on their



ethnic origin and on the diagnostic criteria system accepted in different research centers. The aim of this study was to identify studies of prevalence of recurrent aphthous ulceration in populations.

METHODS: In this systematic review, we did a general literature search of databases MEDLINE between 01/01/ 2004 to 31/12/2014. Two authors assessed and included all the studies about prevalence of recurrent aphthous ulceration.

RESULTS: The prevalence of Recurrent aphthous ulceration varies from 0.3% (Tabriz) to 78% (Jordan). Based on studies the prevalence of RAS during this period the prevalence of RAU was 3.6% in Turkey, 21.7% in India, 40% in a sample of children in America, 28.2% in Iraq, 25.2% in Tehran 28.2% and 19.4% in a sample of medical students in Kerman. Many epidemiologic studies confirmed the higher incidence of RAS in people with a higher socio-economic status. Also females and smokers seem to be at a higher risk of the disease development in comparison to males and nonsmokers.

CONCLUSION: The prevalence of RAS varies widely in different communities. In Iran, the prevalence of RAS was low in Tabriz and relatively high in Tehran. It seems that despite the high prevalence of these ulcers in Iran, there are not many epidemiological studies in this field. Therefore this study emphasizes on design of further population-based studies, and take careful history and identify risk factors in these patients.

KEYWORDS: Recurrent aphthous stomatitis, Prevalence, Systematic review.

Comparison of effects of psychiatric drugs on salivary flow rates: A systematic review

Maryam Rad DDS, MSc¹, Arash Shahravan DDS, MSc², Molouk Torabi DDS, MSc³, Masoumeh Sadeghi MSc⁴

¹ Specialist of Oral Medicine, Kerman, Iran

² Associated Professor, Department of Endodontics, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Associated Professor, Department of Oral and Maxillofacial Pathology, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

⁴ MSc in Epidemiology, Research Center for Modeling in Health, Kerman University of Medical Sciences, Kerman, Iran
Email: rad_1152@yahoo.com

Abstract

BACKGROUND AND AIM: Dry mouth is a common side effect of antipsychotic drugs. The aim of this study was to identify studies of effect of psychiatric drugs on salivary flow rate and do a meta-analysis of available data to compare the effects of psychiatric drugs on salivary flow rates.

METHODS: We did a general literature search of databases MEDLINE, EMBASE, SCPUSE, PROQUEST, and SICIENCE DIRECT between 01/01/ 1998 to 31/12/2010. We included all randomized controlled trials for people who are taking antipsychotic drugs. Two authors assessed the quality of all the RCTs by using the Consort score. Finally all the RCTs that have assessed the effect of these drug on the salivary glands were included in the meta-analysis. We used a chi-squared test, to investigate the possibility of heterogeneity. A significance level of < 0.10 was interpreted as evidence of heterogeneity.

RESULTS: The results indicated that prevalence of dry mouth in patients treated with Olanzapine, in comparison with those under other antipsychotic drugs treatment were not significantly related (OR = 0.99, P = 0.989); however, it was significantly more than the placebo (OR = 3.44, P = 0.008). In contrast, the prevalence of dry mouth in patients treated with quetiapine was significantly more than other drugs (OR = 2.36, P = 0.003) as well as placebo (OR = 4.49, P = 0.000). Results of meta-analysis of studies about antidepressant drugs, showed that the prevalence of dry mouth in patients treated with bupropion (OR = 2.03, P = 0.001), Citalopram (OR = 2.63, P = 0.0001), and Duloxetine (OR = 2.81, P = 0.0001) was more than placebo. In this group the prevalence of dry mouth in patients that treated with Venlafaxine (OR = 1, 56, P = 0.017) was significantly more than other drugs, and prevalence of xerostomia in patients that treated with Citalopram (OR = 0.29, P = 0.14) was less than other drugs but this difference was not significant.

CONCLUSION: The results indicated that prevalence of dry mouth in patients treated with Olanzapine (In antipsychotic drugs group) and Citalopram (In antidepressant drugs group) were less than those under other antipsychotic drugs treatment.

KEYWORDS: Psychiatric drugs, Systematic review, Xerostomia.



Burning mouth syndrome: current therapeutic approach

*Nasrin Rafieian DDS, MSc¹, Maryam Baharyvand DDS, MSc², Sedighe Bakhtiari DDS, MSc²,
Gholam Ali Najafi Parizi DDS, MSc³*

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Alborz University of Medical Science, Karaj, Iran

² Associate Professor, Department of Oral Medicine, School of Dentistry, Shahid Beheshti University of Medical Science, Tehran, Iran

³ Assistant Professor, Department of Periodontology, School of Dentistry, Alborz University of Medical Science, Karaj, Iran

Email: rafieian@yahoo.com

Abstract

BACKGROUND AND AIM: Burning mouth syndrome (BMS) is a chronic burning pain, usually in the absence of clinical and laboratory findings. The prevalence of this disorder in the general population is estimated to be 1% to 15%. It particularly affects the middle-aged persons, and women are involved 7 times more frequency than men. In spite of several kind of treatment approach for BMS, There has been no general agreement on its best treatment. Most often patients with inexplicable oral complaints are referred from one health care professional to another without effective management. This approach cause significant emotional impact on patients. The present article provides update information about current treatment choices for BMS. Literature was searched Medline, Elsevier, Embase, and Cochrane Library from 1986 to 2014. Any articles in English (clinical trials, cross sectional, longitudinal and epidemiological studies) were included. Meanwhile, theses for the degree of DDS in Shahid Beheshti and Azad dental faculties about BMS and textbooks were reviewed thoroughly. Although BMS is of unknown etiology but various local, psychological and systemic factors can trigger or exacerbate this disorder. So it is important to resolve any risk factor or cognitive-behavior therapy in management of BMS. On the other hand systemic or local drugs may be mandatory to treat BMS. Appropriate diagnosis is necessary for management of BMS and several treatment protocols should be used simultaneously to improve pain and burning.

KEYWORDS: Burning mouth syndrome, Stomatodynia, Stomatopyrosis, Oral Pain.

Orofacial pain management: a review

Fatemeh Rezaie DDS, MSc¹, Hamid Reza Mozafari DDS, MSc¹, Fatemeh Ahmadi Motemayel DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Hamedan University of Medical Sciences, Hamedan, Iran

Email: khalilinia83@yahoo.com

Abstract

BACKGROUND AND AIM: Some of the most prevalent and debilitating pain conditions arise from the structures innervated by the trigeminal system (head, face, masticatory musculature, temporomandibular joint and associated structures). Orofacial pain (OFP) can arise from different regions and etiologies. Temporomandibular disorders (TMD) are the most prevalent orofacial pain conditions for which patients seek treatment. Temporomandibular disorders include a number of clinical problems that involve the masticatory musculature, the temporomandibular joint (TMJ) or both. Trigeminal neuropathic pain conditions can arise from injury secondary to dental procedures, infection, neoplasias, or disease or dysfunction of the peripheral and/or central nervous system. Neurovascular disorders, such as primary headaches, can present as chronic orofacial pain, such as in the case of facial migraine, where the pain is localized in the second and third division of the trigeminal nerve. Together, these disorders of the trigeminal system impact the quality of life of the sufferer dramatically. A multidisciplinary pain management approach should be considered for the optimal treatment of orofacial pain disorders including both non-pharmacological and pharmacological modalities.

KEYWORDS: Orofacial, Pain, Management.



Effectiveness of non-thermal, non-Ablative CO₂ laser therapy in treatment of reluctant trigeminal neuralgia: a case series

Fahimeh Rezazadeh DDS, MSc¹, Najmeh Showraki DDS², Fatemeh Mosalanejad³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

² Postgraduate Student, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

³ Dental Student, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

Email: showraki_n@sums.ac.ir

Abstract

BACKGROUND AND AIM: Trigeminal neuralgia is a common chronic oro-facial pain in patients older than 50 years. It manifests as a severe shooting pain with stimulation of trigger points. This condition may be severely debilitating, affecting the patient's quality of life and daily function, especially in the elderly. Given rise to various medicinal treatments, some patients are reluctant to treatment or can not tolerate the side effects. Regarding these problems, laser therapy has been become of notice in the treatment of trigeminal neuralgia patients. Various studies have indicated the analgesic effects of low level lasers in these patients.

METHODS: In this study seven trigeminal neuralgia patients which resistant to treatment were treated with Non-thermal, Non-Ablative CO₂ Laser Therapy (NACLT), during 6 sessions.

RESULTS: Among these seven patients, 5 had significant reduction in pain (VAS), which four were free of pain after the end of treatment and the other one reported low levels of pain. In all 5 patients trigger points stimulating pain had disappeared.

CONCLUSION: Non-thermal, Non-Ablative CO₂ Laser Therapy (NACLT) is at least effective in eliminating trigger points, especially skin points, in trigeminal neuralgia patients. However; more clinical trials with control groups needs to be conducted.

KEYWORDS: Non-thermal, Non-Ablative CO₂ laser, Therapy, Treatment, Trigeminal neuralgia.

Review of laser therapy in treatment of dental hypersensitivity

Fahimeh Rezazadeh DDS, MSc¹, Rahele Ebrahimi DDS²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

² Postgraduate Student, Department of Oral Medicine, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran

Email: ebrahimira@yahoo.com

Abstract

BACKGROUND AND AIM: Dentinal hypersensitivity (DH) is prevalent among a large portion of individuals. Various agents have been recommended to reduce DH including sodium fluoride, potassium ion, oxalate, resin bonding agent and abrasive dentifrices. However most treatments are either ineffective or are effective only for short time. Many studies have been performed regarding the treatment of DH, although dentists are still confused about precise treatment protocol. Laser therapy has been cited as a possible new treatment option for DH, and has become a subject of intensive research in recent decades. Few studies were conducted on double-blind randomized trial or long follow up or compared laser therapy with conventional treatment. Since available evidence is controversial and this method should be used with caution, the purpose of this paper was to review laser effect on DH and to discuss most aspects of this technique. Since a certain treatment has not yet been introduced for DH, a combination of laser therapy and topical desensitizing factors can increase the success of the treatment compared with either treatment alone.

KEYWORDS: Laser therapy, Treatment, Dental hypersensitivity.



Diagnosis and treatment of intraoral lipoma: A case report

Maryam Robati DDS, MSc¹, Hojjat Yousefimanesh DDS, MSc², Mohammad Shooryabi DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

² Assistant Professor, Department of Periodontology, School of Dentistry, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran
Email: yoosefi@yahoo.com

Abstract

BACKGROUND AND AIM: Lipoma is a benign soft tissue neoplasm of mature adipose tissue seen as a common entity in the head and neck region. Intraoral lipoma is a rare entity, with a prevalence rate of 1% to 4% of all oral lesions. Oral lipoma can occur in various sites but the majority of oral lipomas are found on the buccal mucosa and tongue and occur in individuals over 40 years of age, without any sex predilection. We present here a case of lipoma of the buccal vestibule with 2 years duration in a 60 years old male that mimic feature of dental abscess.

KEYWORDS: Lipoma, Buccal vestibule, Oral.

Systematic review of neuropathic orofacial pain: etiologies and treatments

Zahra Saberi DDS, MSc¹, Faranak Jalalian DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran

² Specialist of Oral and Maxillofacial Radiology, Dental Implants Research Center, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran
Email: faranak_jalalian@yahoo.com

Abstract

BACKGROUND AND AIM: Head and neck neuropathic pain disorders due to deafferentation are important for dentists, not only because they are confusing to diagnose, but also because they are difficult to treat. They are a serious medical and legal concern as well, because they can occur as the result of treatment that would otherwise not normally cause pain or harm. Neuropathic orofacial pain (NOP) is defined as pain initiated or caused by a primary lesion or dysfunction in the nervous system. Etiologies of neuropathic pain vary from local trauma to central nervous system pathologies. Traumatic neuropathies can occur after dental procedures, such as extractions, endodontic treatment, and dental implant insertion. The review of articles has been done between 1980 to 2013 with key words: "dental implant", "Hyperalgesia", "Neuropathic orofacial pain". The available literature indicates a higher prevalence of NOP in women in their late forties. Relevant clinical features of neuropathic pain include: 1) precipitating factors, such as trauma or disease (infection), and a delay in onset from the initial injury (days to months); 2) complaints of dysesthesias (abnormal unpleasant sensations), burning, paroxysmal, lancinating, or sharp sensations, and pain in an area of sensory deficit; 3) hyperalgesia, allodynia. To prevent nerve damage during the drilling sequence, the routine use of intraoperative periapical radiographs and tomographic images are reliable tools, allowing the operator to confidently adjust the direction and depth of the implant during its placement. Most importantly, it helps to prevent the risk of injury to the nerve in those cases where vertical alveolar bone is limited. A principal drug for the treatment of NOP is amitriptyline. Phenothiazines, beta-blockers, anticonvulsants, agonists of the GABA receptor, topical medications and minor opiate analgesics also have been used in the treatment of this pain.

KEYWORDS: Systematic review, Neuropathic orofacial pain, Etiology, Treatment.



Saliva: the new diagnostic method in dentistry

Shadab Safarzadeh Khosroshahi DDS, MSc¹, Mohammad Ali Tamaddon²

¹ Assistant Professor, Department of Restorative Dentistry, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran

² Dental Student, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran

Email: ali_tamaddon@yahoo.com

Abstract

BACKGROUND AND AIM: Saliva-the product of multiple salivary glands-plays a key physiologic role in the lubrication and repair of the oral mucosa, the formation and swallowing of food boluses, the digestion of starch. The multifarious components of saliva protect the integrity of the oral tissues, and also provide clues to local and systemic diseases and conditions. These "salivary biomarkers" are being explored as a means of monitoring general health and in the early diagnosis of disease. Saliva is relatively easy to collect and the costs of storage and shipping tend to be lower than those for serum and urine. For the patient, the noninvasive collection techniques for saliva can dramatically reduce anxiety and discomfort. In this article we reviewed the role of different salivary agents in diagnostic methods. Among more than 30 articles we reviewed the key role of Saliva as a diagnostic agent. Data collected and evaluated for this article. By reviewing the articles we found that in compare to other clinical diagnostic methods, saliva collection is more comfortable and less costly. On the other hand, saliva components, directly show the condition of systemic health. One main disadvantage of the utilization of saliva as a diagnostic liquid is the fact that some substances submitted to analysis are found in lower quantities in saliva than in blood. Results showed that regards to noninvasive, comfortable and reliable saliva collection techniques, this multi component product, can be an important diagnostic agent in near future.

KEYWORDS: Saliva, Diagnostic method, Dentistry.

Pain as the first symptom of oral SCC patients in Tehran

Katayoun Sargeran PhD¹

¹ Assistant Professor, Department of Oral Public Health, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

Email: k-sargeran@tums.ac.ir

Abstract

BACKGROUND AND AIM: Oral cancer is one of the most life-threatening diseases which awareness of the early symptoms and early diagnosis is crucial to the improvement of oral cancer patients' survival and quality of life. Squamous cell carcinoma contributes to more than 90% of oral cancers and its early symptom in most of the occasions is ulcer. Pain is a rare early symptom. The objective of this study is to investigate the frequency of pain as the first symptom of oral SCC patients attending to three university hospitals in Tehran.

METHODS: In this cross-sectional descriptive study, 100 patients with primary, non-metastatic oral Squamous Cell Carcinoma (SCC) who were treated in three university hospitals between 2004 and 2006 were included. SCC of gums, buccal mucosa, tongue, floor of the mouth, soft and hard palate were studied.

RESULTS: Of all the patients 53% were males with the mean age of 61.5 (SD 15.8 years; range 24-100 years) at diagnosis. In 73% of patients the early first symptom was ulcer and in 8% pain. Other early symptoms were swallow, white lesion, burning sensation, numbness and dysphagia respectively.

CONCLUSION: Although in most cases of oral SCC the first symptom is ulcer, dentist should be aware of pain as the early symptom, which is of utmost importance for early detection and diagnosis.

KEYWORDS: Pain, Symptom, Oral SCC.



Regional anesthesia in management of chronic facial pain

Shahram Sepehrmand DDS¹

¹ Postgraduate Student, Department of Orofacial Pain, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran
Email: peter_chek@yahoo.com

Abstract

BACKGROUND AND AIM: Lack of certain treatment for many of neuropathic and neuralgiform pains, and need to more much doses of drugs till reaching to toxic dose, limit the use of this manners in control of chronic pain. In accordance of problems in diagnosis the causes of nonodontogenic pains, in order to help these patients, we should use other techniques. So dentists knowledge from other therapeutic options is very necessary of course many neurosurgeries are options but high risk option for many patients they are. Regional anesthesia that have been done by pain specialists is a grate manner for patients those have sever and refractory pain. In this article we try to know last progresses they are. We indicate the philosophy and technique of these manners and their advantages and disadvantages.

KEYWORDS: Anesthesia, Chronic, Facial pain.

Evolution of general dentists knowledge and diagnose skills about oral cancer (SCC) in Urmia, in 2013

Seyyed Amir Seyyedi DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Urmia University of Medical Sciences, Urmia, Iran
Email: seyvediamir@yahoo.com

Abstract

BACKGROUND AND AIM: One of 10 most causes of death. The proper knowledge of general dentists about oral cancer and suspected precancerous can cause early diagnosis and treatment of patient, so we decided to determine the knowledge of dentists in Urmia about oral cancer.

METHODS: This descriptive study was cross-sectional done on 133 general dentists who worked in Urmia. A questioner was performed in two sections (personal information and 14 questions about oral cancer) and dentists answered it. Data were analyzed by SPSS software and pearson correlation coefficient.

RESULTS: The dentists were 102 male and 31 females, the mean age was 44.43 years old and the mean time passed from their graduation was 15.63 years. Finding: The mean score of total dentists knowledge was 4.03 of 7. The mean score of knowledge in male was 3.91 and female was 4.44. Their knowledge were declined by increasing the time passed from their graduation. The mean score of total dentists diagnosis skills was 3.57 of 7. The mean score of diagnosis skills in male was 3.46 and female was 3.94. 98 dentists knew the oral cancer in which age is most common appear, but over half of answers (27.2%) to the lesion with dysplastic squamous cell carcinoma was incorrect.

CONCLUSION: The results indicated that knowledge of dentists in Urmia about oral cancer was not sufficient.

KEYWORDS: Knowledge, Oral cancer, General dentist, Diagnose skill.

Post operative pain in children

Laile Shafie DDS, MSc¹, Elham Farokh Gisor DDS, MSc²

¹ Assistant Professor, Department of Pediatric Dentistry, School of Dentistry, Keramn University of Medical Sciences, Keramn, Iran

² Associate Professor, Department of Pediatric Dentistry, School of Dentistry, Keramn University of Medical Sciences, Keramn, Iran
Email: lshafie2004@yahoo.com

Abstract

BACKGROUND AND AIM: Pain can interfere with daily routines and is considered as one of the most important health problems.



METHODS: tistry for children is the ability to guideThe foundation of practicing den them through their dental experiences.If children experience pain during dental procedures, their future as dental patients may be damaged.

RESULTS: Post treatment pain is explained as discomfort that has not existed before or has increased after receivingtreatment. The frequency of post operative pain after root canal therapy has been reported between 2-88 % in permanent teeth of adults.

CONCLUSION: Few studies have evaluated post dental treatment in children. Here in is a review of post dental treatment pain in children, the related factors and also its frequency.

KEYWORDS: Pain, Children, Treatment.

Myxoma of jaw: Case presentation

Mehdi Shahabinejad DDS¹

¹ Postgraduate Student, Department of Oral and maxillofacial Pathology, School of Dentistry, Hamedan University of Medical Sciences, Hamedan, Iran
Email: mehremadar@yahoo.com

Abstract

BACKGROUND AND AIM: Odontogenic myxoma represent an uncommon benign neoplasm comprising of 3– 6% of all odontogenic tumors. I report a case of myxoma in mandible of 22 year old female patient with extensive jaw expansion but mild pain. This patient came to the clinic for extraction of lower left mandibular third molar But upon trying to perform inferior alveolar nerve block no bone contact was observed, so patient asked to take a panoramic radiograph. A well defined radiolucency extending from distal of tooth # 36 up to the lower border of condyloid and coronoid process was observed. A differential diagnosis of: 1. odontogenic keratocyst 2.mural ameloblastoma 3.dentigerous cyst was assumed according to clinical and radiographic features. But upon histologic examination diagnosis of myxoma have been considered which was approved by immunohistochemical examination.

KEYWORDS: Myxoma, Jaw, Odontogenic keratocyst, Mural ameloblastoma, Dentigerous cyst.

Laser and burning mouth syndrome (BMS)

Shiva Shirazian DDS, MSc¹

¹ Assistant Professor, Department of Oral Medicine , School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran
Email: shiraziash@tums.ac.ir

Abstract

BACKGROUND AND AIM: BMS is one of the most common chief complaint of patients in dental offices. Different causes have been considered for BMS that result in offering various treatment plans. Laser has many applications in dentistry nowadays and uses in treatment of several lesio ns and disorders. Usage of different Lasers with various specifications result in reporting controversy in articles about the effect of Laser in BMS treatment. Application of several lasers with their characteristics and their therapeutic effects will be compare in this lecture.

KEYWORDS: Burning Mouth Syndrome, LASER.



Comparison of interleukin 17 and interleukin 22 in saliva of oral lichen planus patients with healthy people

*Shiva Shirazian DDS, MSc¹, Farzaneh Agha Hosseini DDS, MSc², Esa Salehi PhD³,
Mahdi Vatanpoor DDS, MSc⁴, Nilofar Banijamali DDS⁵*

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

² Professor, Department of Oral Medicine, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

³ Assistant Professor, Department of Immunology, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran

⁴ Assistant Professor, Department of Endodontics, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran

⁵ Dentist, Tehran, Iran

Email: shiraziansh@tums.ac.ir

Abstract

BACKGROUND AND AIM: Lichen planus is a common chronic inflammatory disease with unknown etiology that affects the skin and mucosa. IL-17&IL-22 are specific interleukin secreted from Th17. A large number of evidence supports their roles in various autoimmune disorders such as rheumatoid arthritis, psoriasis, Chorn s disease and multiple sclerosis. The aim of this study was to assess salivary IL-17&IL-22 profile in patients with oral lichen planus (OLP) and compare it with healthy people.

METHODS: 26 recently diagnosed patients with OLP and 41 healthy people was recruited to the study. IL-17 & IL-22 was quantified in saliva by Enzyme-linked immunosorbent assay.

RESULTS: Salivary level of interleukin-22 in oral lichen planus patients was significantly lower compare to healthy controls (P = 0.003). Salivary level of interleukin-17 in oral lichen planus patients was higher in comparison to healthy controls but the difference was not statistically significant.

CONCLUSION: It seems that salivary level of interleukin-22 in oral lichen planus patients is decreased compared to healthy people but interleukin-17 level in patients does not differ with healthy peopl.

KEYWORDS: Interleukin-17, Interleukin-22, Oral lichen planus, Saliva.

Introducing a mobile software: DMOTMCP1.0 (dental considerations in systemic patients)

Muhammad Shooryabi DDS, MSc¹, Seyed Amir Razavi Satvati DDS, MSc²

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry Ahvaz University of Medical Sciences, Ahvaz, Iran

² Assistant Professor, Department of Endodontics, School of Dentistry, North Khorasan University of Medical Sciences, Bojnurd, Iran

Email: dsshoriabii@yahoo.com

Abstract

BACKGROUND AND AIM: The educational efficacy of computer and mobile software has been confirmed in various studies. The first version of this mobile software has been designed for java platform that includes the following sections:

- 1- Titles of the main contents, including dental infectious diseases
- 2- Biography of Ahmad Hedayat, one of the student martyrs of Kerman
- 3- Introduction of the software
- 4- Settings
- 5- Search

This software is the first educational mobile software in dentistry in Iran, in which the most important factors that need to be observed in the dental treatment of the patients with systemic problems have been intended to be provided. In the titles' section, over 60 systemic diseases have been listed and the problems associated with each disease have been provided in 4 subsections entitled: 1) potential dental problems, 2) oral manifestations, 3) prevention of problems and 4) required changes in the dental treatment plan of the disease. This software has been designed for the dental students and



professionals to use, and is a reference to collect the relevant materials in the dental reference books. It should be pointed out that this software has the capacity to search the existing materials, and the font and theme of the software can be personalized by the user as well. Moreover, the new versions of this software will be developed for the new operating systems such as Android and IOS and diagnostic algorithm for dental lesions will be added in terms of content.

KEYWORDS: Mobile, Software: DMOTMCP1.

The effect of ginger extract on radiotherapy-oriented salivation in patients with xerostomia: A double-blind controlled study

*Mohammad Shooryabi DDS, MSc¹, Seyed Amir Razavi Satvati DDS, MSc², Dorna Sadeghi Ardekani³,
Behzad Mansouri PhD⁴*

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Ahvaz University of Medical Sciences, Ahvaz, Iran

² Assistant Professor, Department of Endodontics, School of Dentistry, North Khorasan University of Medical Sciences, Bojnurd, Iran

³ Dental Student, School of Dentistry, Ahvaz University of Medical Sciences, Ahvaz, Iran

⁴ Assistant Professor, Department of Statistics, University of Shahid Chamran, Ahvaz, Iran

Email: dsshoriabii@yahoo.com

Abstract

BACKGROUND AND AIM: Studies conducted on various properties of ginger showed that ginger has parasympathetic activity and can stimulate the salivary secretion. So, this study was aimed to evaluate the ginger total extract's effect on the salivary secretion increase and xerostomia improvement in patients who underwent the radiotherapy in Ahvaz Golestan hospital in 2013.

METHODS: This double-blind intervention trial was conducted on 40 patients with a history of head and neck radiotherapy. Data collection tools included two questionnaires designed using other similar studies. After the preparation of the capsules (500mg) containing total extract of ginger and placebo, the whole saliva of the patients was measured and they were asked to complete the questionnaire of xerostomia symptoms. Then the capsules randomly were given to the two groups of patients and they were asked to take one capsule every six hours. After two weeks, the whole saliva of patients again was measured and they were asked to respond to questions of the first questionnaire again. Furthermore, patients responded the second questionnaire questions to assess the effects of the drug on xerostomia symptoms. The data were analysed using SPSS version 15.

RESULTS: After two weeks, many of the xerostomia symptoms were healed and patients believed that the ginger has exerted positive effects on reducing their problems; they also want to continue to use it. The saliva secretion level in the ginger group was significantly higher than the placebo group ($p < 0.05$).

CONCLUSION: Ginger can improve the xerostomia symptoms and increase salivation in patients.

KEYWORDS: Xerostomia, Hyposalivation, Radiotherapy, Ginger.

Changes in salivary antioxidants and vitamins in patients with oral lichen planus

Zahra Taghavi DDS, MSc¹, Mahdieh Zarabadi DDS, MSc²

¹ Specialist of Oral Medicine, Hamedan, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran

Email: z.taghavi.62@gmail.com

Abstract

BACKGROUND AND AIM: The aim of this study was to evaluate the antioxidant vitamins A, E and C in the saliva of



patients with oral lichen planus (OLP) compared to healthy individuals. Lipid peroxidation may be involved in the inflammatory and premalignant and micronutrients such as vitamins A, E and C can replicate and spread of harmful free radicals in biological membranes to prevent.

METHODS: In this study, 36 patients with erosive oral lichen planus (group) and 36 healthy volunteers (control group) aged 30 to 55 years, the 5 ml of unstimulated saliva was collected. Latest subjects with no history of smoking, drug use impairs the antioxidant defense system and systemic diseases are the most recent quarter. Levels of malondialdehyde (MDA), total antioxidant capacity (TAC) and vitamins A, E and C groups were measured in saliva.

RESULTS: The mean MDA level in OLP patients was significantly higher than the control group and this difference was statistically significant. Mean levels of vitamins A, E and C and lower than OLP patients in the TAC group is, and this difference is also statistically significant.

CONCLUSION: According to the results of this study, antioxidant deficiency and altered respons to elevated levels of oxidative stress may have a role in the pathogenesis of oLP. If confirmed by further research, this study can be used antioxidant supplements, including vitamins A, E and C in the treatment of patients with OLP recommended.

KEYWORDS: Oral lichen planus, Antioxidants, Saliva.

Effects of topical dexpanthenol on radiotherapy and chemotherapy induced oral mucositis

Jamileh Bigom Taheri DDS, MSc¹, Soudeh Jafari DDS²

¹ Professor, Department of Oral Medicine, School of Dentistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran

² Postgraduate Student, Department of Oral Medicine, School of Dentistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran
Email: soudehjafari@yahoo.com

Abstract

BACKGROUND AND AIM: Oral mucositis can be a significant problem for cancer patients. It is typically associated with pain and it also can reduce quality for life. Topical dexpanthenol improves stratum with pain and it also can reduce quality of life. Topical dexpanthenol improves stratum corneum hydration, reduces the transepidermal water loss and stimulates epithelialization. No absolute treatment has been demonstrated to be effective for chemotherapy or radiotherapy induced oral mucositis. In this study we aimed to investigate the effectiveness of dexpanthenol mouthwash on mucositis severity and pain intensity.

METHODS: In this multicenter, randomized clinical trial; 16 patients with mucositis grade 1 to 3 received dexpanthenol 5% mouth wash or normal saline for about 3 weeks. Oral pain severity was scored weekly using a VAS (visual analogue scale) of 10 centimeters. WHO scale was used to grade the intensity of mucositis. To determine the effect of treatment, a quality of life questionnaire, consisting of 35 queries, was filled to out by all patients at the beginning and at the end of study. Statistical analyses of data was performed using Mann-Whitney test and Repeated Measure ANOVA tests.

RESULTS: Neither of these groups showed any improvement in the severity of mucositis. The quality of life improved in both groups but it was more significant in dexpanthenol group which was statistically significant ($P = 0.05$).

CONCLUSION: Topical Dexpanthenol 5% as mouth wash cannot improve mucositis induced by radiotherapy and chemotherapy. But comparing to normal saline it can reduce the severity of pain and improve the quality of life in this group of patients.

KEYWORDS: Dexpanthenol, Radiotherapy, Chemotherapy, Oral mucositis.



Systemic and oral manifestation of acute leukemia

Bita Tavakoli DDS¹, Somayeh Alirezai DDS, MSc², Saranaz Azari Marhabi DDS, MSc³

¹ Dentist, Tehran, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Azad University of Medical Sciences, Tehran, Iran

³ Assistant Professor, Department of Oral Medicine, School of Dentistry, Qom University of Medical Sciences, Qom, Iran
Email: dr.somayehalirezai@gmail.com

Abstract

BACKGROUND AND AIM: There are several etiologies for oral lesions and ulcers. The majority of these lesions and ulcers are benign and often self-limiting; therefore, the art of a physician is to diagnose those sinister lesions that can be life-threatening. Lesions of different etiologies have different characteristics, and proper knowledge of these characteristics is essential for health care professionals who are involved in treating oral lesions. For example, while genetically induced gingival overgrowth is normal colored and firm, gingival overgrowth due to blood dyscrasias are edematous, soft, tender to touch and show tendency to bleed. Oral lesions are relatively common in leukemias, as apart of a widespread disease. However, oral ulcers and lesions could be the first presentation of the disease. Leukemia is a broad term covering a spectrum of diseases. Clinically and pathologically. Hence, immediate treatment sometimes is not necessary and patients can be monitored for some time before treatment to ensure maximum effectiveness of therapy. On the other hand, acute leukemias are characterized by a rapid and uncontrolled proliferation of poorly differentiated blast cells, for which immediate treatment is required. They are abrupt in onset, and are aggressive and rapidly fatal if left untreated. Oral manifestations are more common in acute leukemias. One of the sinister and fatal etiologies of oral ulcers and lesions, is Acute Myeloid leukemia (AML). They usually present with signs and symptoms of bone marrow failure, including anemia, infection, and bleeding. At first, symptoms are non-specific; such as bone pain, joint pain, or other flu-like symptoms, and patients usually seek medical help because of these constitutional symptoms that have lasted more than usual. Most of the time, the patients with an oral lesion first consult their dentist, who—with proper knowledge and awareness of potentially fatal etiologies—can play a vital role in early diagnosis of the disease. According to various reports.

KEYWORDS: Acute Leukemia, Acute Myeloid leukemia, Oral Ulcers.

Diagnostic challenges of odontogenic and nonodontogenic sinusitis pain; The application of advanced imaging techniques

Elaheh Tohidi DDS, MSc¹

¹ Assistant Professor, Department of Oral and Maxillofacial Radiology, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

Email: tohidie@mums.ac.ir

Abstract

BACKGROUND AND AIM: Differentiating pain caused by rhinosinusitis from that of dental etiology can be one of the more difficult diagnostic challenges faced by the clinician. This is primarily due to the close anatomic relationship between the floor of the maxillary sinus & the roots of the posterior maxillary teeth. And misdiagnosis may lead to unnecessary RCT, periapical surgery, and even multiple tooth extractions, with no effective pain relief. In this study we discuss the mutual impacts of sinus and teeth, and also distinguishing differences between symptoms of odontalgia & sinus pain, and the application of advanced imaging techniques in detection of pain origin. Dental evaluations with only PA or panoramic radiographs frequently fail to diagnose a dental disease in patients with odontogenic sinusitis. Evaluation of a patient with persistent chronic rhinosinusitis, particularly if unilateral or associated with foul smell or taste, should prompt strong consideration of more advanced imaging with thorough inspection for evidence of dental disease.

KEYWORDS: Rhinosinusitis, Dental pain, Advanced imaging, CBCT.



Effect of mobile phone use on salivary concentrations of protein, amylase, lipase, immunoglobulin A, lysozyme, lactoferrin, peroxidase and C-reactive protein of parotid gland

MahsaYarbakht DDS¹, Marjan Kheirmand Parizi², Seyed Amir Hossein Gandjalikhan Nassab³,
Maryam Alsadat Hashemipour DDS, MSc⁴

¹ Postgraduate Student, Department of Pediatric Dentistry, School of Dentistry, Mashhad University of Medical Sciences, Mashhad, Iran

² Dental Student, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

³ Medical Student, School of Medicine, Kerman University of Medical Sciences, Kerman, Iran

⁴ Assistant Professor, Department of Oral Medicine, School of Dentistry, Kerman University of Medical Sciences, Kerman, Iran

Email: marjan_khp12@yahoo.com

Abstract

BACKGROUND AND AIM: The possibility of side effects associated with the electromagnetic waves emitted from mobile phones is a controversial issue. The present study aimed to evaluate the effect of mobile phone use on parotid gland salivary concentrations of protein, amylase, lipase, immunoglobulin A, lysozyme, lactoferrin, peroxidase and C-reactive protein.

METHODS: Stimulated salivary samples were collected simultaneously from both parotid glands of 86 healthy volunteers. Salivary flow rate and salivary concentrations of proteins, amylase, lipase, immunoglobulin A, lysozyme, lactoferrin, peroxidase and C-reactive protein were measured. Data were analysed using t-tests and oneway analyses of variance.

RESULTS: Salivary flow rate and parotid gland salivary concentrations of protein were significantly higher on the right side compared to the left in those that predominantly held mobile phones on the right side. In addition, there was a decrease in concentrations of amylase, lipase, lysozyme, lactoferrin and peroxidase.

CONCLUSION: The side of dominant mobile phone use was associated with differences in salivary flow rate and parotid gland salivary concentrations, in right-dominant users. Although mobile phone use influenced salivary composition, the relationship was not significant.

KEYWORDS: C-reactive Protein, Saliva; Parotid Gland, IgA, Lipase, Amylase, Cellular Phone.

Burning mouth syndrome

Motahareh Yousefi¹

¹ Dental Student, Dental School of International Branch, Shiraz University of Medical Sciences, Shiraz, Iran

Email: moti.yousefi@yahoo.com

Abstract

BACKGROUND AND AIM: Burning mouth syndrome (BMS) is a common chronic pain condition which is also termed glossodynia, orodynia, oral dysaesthesia, glossopyrosis, stomatodynia, burning tongue, stomatopyrosis, sore tongue, burning tongue syndrome, burning mouth, or sore mouth. It is an idiopathic intraoral mucosal pain condition that is not accompanied by clinical lesions or systemic disease and is most prevalent in postmenopausal women. Women are 3-7 times more likely than men of a similar age to experience burning mouth syndrome (BMS) symptoms. It causes a deep burning pain and lasts for at least 4 to 6 months. The prominent feature is the symptom of burning pain which can be localised just to the tongue and/or lips but can be more widespread and involve the whole of the oral cavity. A bitter or metallic taste also may be present. The etiology of BMS is multifactorial such as Local Factors, Systemic Factors, Psychogenic Factors, Neurogenic Factors. We have reviewed articles in Embase, Elsevier, Cochrane Library which have been related to BMS and its aetiology and treatments. Although the cause of BMS is unknown but local and systemic factors and psychological causes are found. In addition to local and systemic therapy, we should remove risk factors and also behaviour cognitive therapy can be effective. The clinical history is helpful in diagnosing burning mouth syndrome and also patients must have realistic expectations of the natural course of their condition. There are some



medications that can cause BMS and we can consult for their dosage change. Further trials, of high methodological quality, need to be undertaken in order to establish effective forms of treatment for patients suffering from BMS.

KEYWORDS: Burning mouth syndrome, Therapy, BMS.

Probiotics and oral health

Uldus Zamani DDS¹, Fatemeh Alimoradi DDS¹, Sahar Zamani DDS²

¹ Postgraduate Student, Department of Oral Medicine, School of Dentistry, Tabriz University of Medical Sciences, Tabriz, Iran

² Master Student, Department of Public Health, School of Dentistry, Tehran University of Medical Sciences, Tehran, Iran
Email: alimoradi491@gmail.com

Abstract

BACKGROUND AND AIM: Probiotics are defined as living microorganisms, principally bacteria, that are safe for human consumption and when ingested in sufficient quantities, have beneficial effects on human health. Probiotics have been proven effective for preventing caries and less exploration on improving oral diseases such as gingivitis, periodontitis and halitosis. The mechanism of action of probiotics is related to their ability to compete with pathogenic microorganisms for adhesion sites, to antagonize these pathogens or to modulate the host's immune response. The Aim of this review study is to perform a screening of lactic acid bacteria, according to international guidelines for the elevation of probiotics, in order to select candidate probiotic strains for preventing oral disorders. These lactic acid bacteria show promising properties to be used as potential probiotics for improving oral health. Understanding the mechanisms whereby probiotic species modulate oral immunity is of pertinent importance, however. In this respect, probiotic therapy may have a role in the treatment of oral mucosal diseases, such as lichen planus, pemphigus vulgaris, cicatricial pemphigoid or aphthous stomatitis and in manifestations of other diseases, such as skin diseases. In addition, the role of probiotics in soothing burning mouth and relieving the feeling of dry mouth, provides a lot of scope for research. Traditional oral health preventive measures, such as mechanical cleaning of the teeth and use of fluorides, only partly control the diseases of the oral cavity. Scientific research data are still sparse about probiotics and oral health. Oral and dental diseases are anticipated to be good targets for future probiotic therapy.

KEYWORDS: Probiotics, Oral health, Dental diseases.

Modern pain assessment scales

Mahdieh Zarabadi DDS, MSc¹, Neda Gholami DDS, MSc², Fahimeh Rashidi Meybodi DDS, MSc³

¹ Assistant Professor, Department of Oral Medicine, School of Dentistry, Qazvin University of Medical Sciences, Qazvin, Iran

² Assistant Professor, Department of Oral Medicine, School of Dentistry, Zanjan University of Medical Sciences, Zanjan, Iran

³ Assistant Professor, Department of Periodontics, School of Dentistry, Shahid Sadoughi University of Medical Science, Yazd, Iran
Email: mahdieh.zarabadi@gmail.com

Abstract

BACKGROUND AND AIM: Nowadays there are different methods for assessing the severity and quality of pain experienced by the patients. Each of them describes one or more of the pain aspects and can be used in any age and social community. These methods can help the patients to declare the severity and nature of their pain and also can help the doctors and health workers to choose the best treatment plan in addition to pain diagnosis. Most of these methods provide the accurate criteria for the nature, severity and improvement of the pain, so we could trust them for acute and chronic pains. The most important types are as following: Wong-Baker faces pain rating, 0-10 numeric pain rating scales, visual analogue scale, verbal pain intensity and non-verbal pain assessment (breathing, facial expressing, body language). It is worth of mention that pain severity can be assessed in infants by evaluating behavioral changes. The aim of this study is to review the different pain assessment methods and their advantages and disadvantages.

KEYWORDS: Pain assessment, VAS, Scale, Pain intensity.



Author Index

A

Abassi Farid.....	42, 69
Abdollah Nejad Marzieh	57
Abdollahian Tahmoores	10, 33, 42, 60, 61, 87
Afsa Masoomeh.....	43
Agha Hosseini Farzaneh.....	17, 95
Aghaie Mahbobeh	79
Aghili Hosseinagha	43
Ahadian Hakimeh	10, 21
Ahmadi Motemayel Fatemeh	89
Akhavan Karbasi Mohammad Hossein	10, 21
Akhavan Karbasi Mohammad Hasan.....	85
Akhoondzadeh Mohammad.....	21, 58
Alahyari Arezoo	55
Alaie Arezoo.....	11
Alimoradi Fatemeh.....	44, 100
Alirezaei Somayeh	11, 14, 50, 51, 64, 71, 98
Alirezaie Banafsheh.....	46, 65
Alizadeh Zahra	44
Allameh Maryam	25
Amanat Dariush.....	45
Amanpour Sara	12, 45, 46
Amini Shakib Pouyan.....	12
Amirchaghmaghi Maryam.....	13, 48, 30, 37, 46, 47, 57
Anvari Kazam.....	31
Arabsolghar Mohaddaseh	48, 49
Arjmand Ahmad	74
Asadi-Shekaari Majid.....	79
Ashraf Mohammad Javad	12
Askarifard Sara.....	13
Aslanbeigi Fereshteh	26, 70, 71
Assar zadegan Farhad.....	19
Ataie Zahra	27
Ataran Rana	14, 49
Ayatollahi Amin	28
Ayatollahi Mousavi Sayed Amin.....	50
Ayen Azadeh.....	72
Azari Marhabi Saranaz.....	14, 50, 51, 71, 98
Azarian Amir Abbas.....	37
Azizi Arash.....	11
Azma Ehsan.....	15, 51

B

Babaie Darszi Ali Reza.....	77
Babaiee Soroor Amir Hosien.....	20
Bagheri Abolfazel	16
Baharvand Maryam	17, 29, 52, 89
Bakhtari Azizollah.....	72
Bakhtiari Sedighe	89
Bakyanian Vaziri Pejman	16
Banijamali Nilofar	95
Baradaran Shahrzad.....	25
Basir Shabastari Samira.....	52
Basirat Maryam	16
Bazazzadeh Mona.....	53

Bazregar Samaneh	53
Bijani Ali.....	76
Birang Reza	58
Borna Roya	54

C

Chamani Goli.....	2, 34, 35, 55
-------------------	---------------

D

Dabiri Shahryar	2
Dalband Mohsen	17
Dalirsani Zohreh.....	18, 31, 56, 57, 62, 81, 86
Danesh Ardekani Mohammad	43
Davarmanesh Mehdi	18, 58
Dehghan Reza	27
Deihimi Parviz	58
Delavarian Zahra	13, 56, 57, 66
Donyadideh Nastaran	59
Doost Mohammadi Mohsen	72
Doostmohammadi Somayeh.....	59, 60

E

Ebrahimi Hooman.....	3, 19, 45
Ebrahimi Mohammad Mehdi.....	39
Ebrahimi Rahele	30, 90
Emadian Razavi Fariba.....	32
Emadian Sayedeh Fariba	19
Esfahani Mahsa	40
Eskandari Ana	47
Eslami Hossein	10, 33, 42, 60, 61, 87
Eslami Samaneh	20
Esmaeeli Farzaneh.....	45, 46
Esmaeli Mostafa	16

F

Fani Pakdel Azar	47
Fardisi Sorena.....	12, 45, 46
Farokh Gisor Elham.....	93
Faryabi Javad	20
Farzad Maryam.....	75
Fatahi Meybodi Seyed Amir Reza.....	43
Fattah Fatemesadat	61
Fekri Ali Reza.....	3
Forghani Farshid Reza.....	62

G

Gandjalikhan Nassab Sayed Amir Hossein	66, 79, 99
Gavanji Shahin	72
Geranmayeh Alireza	21
Ghalavani Hanieh	13
Ghalyani Parichehr	21
Gharaie Shideh	46, 65



Iranian Association of Oral Medicine 2014 Meeting and
First National Congress on Orofacial Pain Kerman, Iran

15-17 October 2014



Ghazi Ala.....	62
Gholami Neda.....	21, 100
Golestannejad Zahra	36, 63, 72

H

Haerian Ahmad.....	4
Hajian Khadijeh.....	26, 58
Hajipoor Fatemeh	32
Hajisadeghi Samira.....	22
Hamidi Hamid	24
Haraji Afshin	64
Hashemi Eshagh	46
Hashemi Seyyed Eshagh	57, 65
Hashemian Peyman	23
Hashemipoor Golnar	77
Hashemipoor Maryam Alsadat	53, 54, 61, 66, 76, 79, 99
Hashemy Sayed Shagh	31
Hashem-Zehi Hadi.....	17
Hatami Masoud	66
Heidaripoor Zeinab.....	26, 71
Helli Sanaz	23, 67, 68, 69
Haghani Jahangir	22, 39, 63, 64
Hamian Mina.....	22, 52

I

Iranmanesh Foad	62, 68
Iranmanesh Pedram	72

J

Jabini Raheleh	56
Jafari Soudeh	97
Jahed Keyhani Fereshteh	46, 65
Jalali Moghaddam Elnaz	52
Jalalian Faranak	91
Jalayer Naderi Noushin	42, 69
Jangjoo Arash	44
Javadzadeh Bluori Abbas	4, 10, 24, 66, 80, 81
Javadzadeh Bluori Ehsan.....	10
Joker Leila	24

K

Kalantari Mahsa	69, 70
Kalantari Parisa	69, 70
Kalantriy Behjat Sadat.....	5
Kamyab Kambiz.....	79
Kamyab Nazanin	25
Karghozar Sanaz.....	46, 65
Karoos Parisa.....	30, 81
Kazemi Abdol Hasan	50
Kazemi Hamed Hossein	44, 76, 77, 80
Keshani Foruz.....	26, 70, 71
Khademi Heidar	58, 63, 72
Khage Dalooei Nasim.....	55
Khalighi Hamid Reza	71
Khazaeli Payam.....	28
Kheirmand Parizi Marjan	99
Khozeimeh Faezeh	25, 72

Kia Javad	16
Kohani Parisa.....	72, 73
Kooshyar Mohammad Mahdi	30, 81
Kuzekanani Maryam.....	74

L

Lasemi Eshagh.....	52
Lavaei Mashhadi Fatemeh.....	26
Lotfi Sodabeh	74

M

Madani Faezeh.....	86
Mahdavi Sayyed Omid	59
Mahdieh Zarabadipour.....	40
Malek Mohammadi Tayebeh.....	75
Mansouri Behzad.....	96
Mansouri Reza.....	43
Mehdipoor Masoumeh	7, 14, 23
Mehdizadeh Shervin	82
Mehrabani Mitra	55
Mehrabi Zadeh Hoda.....	76
Mehryari Mahsa.....	76, 77
Mihankhah Zohreh	54, 76
Moavi Raziye.....	77
Moavi Reza.....	77
Modaresi Jalil	43
Moghareabed Ahmad	25
Mohahedi Sayyed Masood	71
Mohajeri Ehsan.....	27, 78
Mohammadi Hedayat	27
Mohiti Ardakani Azra.....	79
Mohsenitavakoli Saman	76
Mohtasham Nooshin.....	28
Mokhlesi Neda.....	79
Momeni Ehsan	28, 43
Momenzadeh Akram	55
Moosavi Mahdieh-Sadat	29
Mortazavi Hamed	17, 29, 71
Mortazavi Nazanin	76, 80
Mortazaviamiri Seyedhadi.....	76
Mosaffa Fatemeh	56
Mosalanejad Fatemeh	90
Mosannen Mozafari Pegah	24, 30, 33, 37, 47, 48, 47, 66, 80, 81
Moshaverinia Maryam.....	30
Mostaan Leila	31
Mostaan Vazifeh.....	47
Motaghi Reza.....	5
Motahari Poriya.....	79
Motallebnejad Mina.....	76, 82
Motezarre Hamid Reza	85
Mottaghi Arash	31, 83
Movagharipoor Ateke.....	31
Mozafari Hamid Reza.....	83, 89

N

Naghsh Narges.....	84
Najafi Fathi Mohsen	37
Najafi Nazanin.....	82



Iranian Association of Oral Medicine 2014 Meeting and
First National Congress on Orofacial Pain Kerman, Iran

15-17 October 2014



Najafi Parizi Gholam Ali	89	Salehi Maedeh	77
Naseri Mohsen.....	19, 32	Salehi Mohammad Reza	72
Navabi Nader.....	27, 28	Samiei Rad Sahand.....	37
Nosrat Zehi Tahereh	32	Samira Basir Shabestari	17
Nouri Simin	44	Sanatkhani Majid.....	37
O		Sanatkhani Mohammad	37
Olia Fatemeh	85	Sarabadani Javad	85
P		Sardari Farimah	38
Pakfetrat Atessa ...	13, 18, 30, 31, 32, 33, 48, 57, 65, 81, 85, 86	Sargeran Katayoun	92
Pardakhty Abbas.....	27, 28	Sarhaddi Alireza	55
Parirokh Masoud	5	Sarjami Naghmeh	37
Pirasteh Amir	74	Sayyadi Fatemeh	76, 82
Poureslami Hamid Reza	86	Seifi Ali	16
Pourshahidi Sara.....	3, 19	Sepehrmand Shahram.....	93
Pourzare Mehrbani Solmaz	10, 33, 42, 60, 61, 87	Seyyedi Seyyed Amir	57, 93
Poyafard Adeleh	74	Shafie Laile.....	92
R		Shafii Zahra	48
Rad Maryam	34, 39, 55, 87, 88	Shahab Shahryar	6
Rafieian Nasrin.....	89	Shahabinejad Mehdi	94
Rahimi Ameneh.....	18	Shahravan Arash.....	88
Rahimi Hoda.....	34	Shakibi Mohammad Reza.....	6
Rahimi Khadijeh.....	55	Shamshiri Pezhman	59
Rahmani Kafshgary Fatemeh	44	Shirazian Shiva.....	39, 94, 95
Rahrovan Sahar	70	Shirin Bak Iman.....	52
Rajabi Mohammad Sadegh.....	59	Shirinbak Iman	17
Rajabi Moones	35	Shirkavand Amir Abbas	72, 73
Ramazani Mohsen	35	Shooryabi Mohammad	91, 95, 96
Rasekhi Javid.....	81	Showraki Najmeh	90
Rashed Mohasel Mahdokht	30, 81	Shrifi Roholah	83
Rashidi Meybodi Fahimeh.....	100	Soheylipour Fatemeh	83
Rasoli Sajad.....	77	T	
Razavi Satvati Seyed Amir.....	95, 96	Tabrizi Reza	12, 96
Reza Forghani Farshid.....	68	Taghavi Zenous Ali	7
Reza Mirshekari Toraj	79	Taghavi Zonor Ali	14
Rezaie Fatemeh	89	Taghi Maghsoudi Mohhamad.....	16
Rezazadeh Fahimeh.....	90	Taheri Jalikeh Bigom.....	97
Rezazadeh Mafi Ahmad	11	Talachi Amir.....	27
Robati Maryam.....	91	Tamaddon Mohammad Ali.....	92
Rohani Bita.....	36	Tavakoli Bita	98
Rostaie Zadeh Zahra.....	34	Tavangar Atefeh	72
S		Tofighi Marzieh.....	72
Saba Nasim.....	16	Tohidi Elaheh	37, 98
Sabaghi Saba	85	Toodehzaeim Mohammad Hossein.....	43
Saberi Zahra	35, 91	Torabi Molouk.....	22, 39, 63, 64, 69, 87, 89
Sadeghi Ardekani Dorna	96	V	
Sadeghi Masoumeh	88	Vasigh Samaneh	46, 65
Saeidian Vahid	70	Vatanpoor Mahdi.....	95
Safarzadeh Khosroshahi Shadab.....	92	Vosoghi Ehsan.....	32
Safizadeh Hosein	55	Y	
Sahebjamee Mahnaz	36, 79	YarbakhtMahsa.....	99
Sajadi Fatemeh Sadat	86	Yousefi Motahareh	99
Sajadi Sayed Alireza.....	23	Yousefimanesh Hojjat	91
Salehi Esa	95	Yousefshahi Hazhir	63
		Z	
		Zahed Anaraki Siavash.....	47



**Iranian Association of Oral Medicine 2014 Meeting and
First National Congress on Orofacial Pain Kerman, Iran**

15-17 October 2014



Zahed Maryam	18, 45	Zarabadi Mahdieh.....	96, 100
Zahedpasha Shaghayegh.....	76	Zarei Mahmoodabadi Ali.....	50
Zamani Elham	31	Zarei Mohammad Reza.....	7, 8, 34, 55
Zamani Sahar.....	100	Zeini Nasim	45
Zamani Uldus	44, 100		