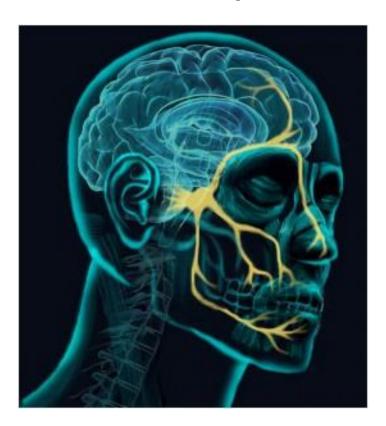


### **Oral Medicine**

### **Evidence Update**



# January 2018 Quarterly

Respecting everyone Embracing change Recognising success Working together Our hospitals.



### **Lunchtime Drop-in Sessions**

All sessions last one hour

#### February (12.00-13.00)

1<sup>st</sup> (Thu) Literature Searching 9<sup>th</sup> (Fri) Critical Appraisal

12<sup>th</sup> (Mon) Statistics

20<sup>th</sup> (Tue) Literature Searching 28<sup>th</sup> (Wed) Critical Appraisal

#### March (13.00-14.00)

8<sup>th</sup> (Thu) Statistics

12<sup>th</sup> (Mon) Literature Searching 20<sup>th</sup> (Tue) Critical Appraisal

28<sup>th</sup> (wed) Statistics

### Your Outreach Librarian- Jo Hooper

Whatever your information needs, the library is here to help. As your Outreach Librarian I offer literature searching services as well as training and guidance in searching the evidence and critical appraisal – just email me at <a href="library@uhbristol.nhs.uk">library@uhbristol.nhs.uk</a>

Outreach: Your Outreach Librarian can help facilitate evidence-based practise for all in the oral and maxillofacial surgery team, as well as assisting with academic study and research. We can help with literature searching, obtaining journal articles and books, and setting up individual Evidence Updates. We also offer one-to-one or small group training in literature searching, accessing electronic journals, and critical appraisal. Get in touch:

library@uhbristol.nhs.uk

**Literature searching:** We provide a literature searching service for any library member. For those embarking on their own research it is advisable to book some time with one of the librarians for a one-to-one session where we can guide you through the process of creating a well-focused literature research and introduce you to the health databases access via NHS Evidence. Please email requests to library@uhbristol.nhs.uk

### **Contents**

Lunchtime Drop-in Sessions	2
Contents	3
Latest Evidence	4
NICE National Institute for Health and Care Excellence	4
Cochrane Library	5
UpToDate®	5
BSOM The British Society for Oral Medicine	
CLINICAL CARE • RESEARCH • EDUCATION	5
Recent Database Articles on Oral Medicine	6
Trigeminal neuralgia, Oro-facial pain and Burning mouth syndrome	6
Oral ulceration	16
Potentially malignant lesions	21
Journal Tables of Contents	38
Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology	38
Oral Diseases Journal	38
Journal of Oral Pathology & Medicine	38
Departmental News	38
Library Opening Times	40

#### **Latest Evidence**

#### NICE National Institute for Health and Care Excellence

<u>Efficacy of Eight Different Drug Treatments for Patients with Trigeminal Neuralgia: A Network Meta-</u> analysis

Source: PubMed - 01 December 2017 - Publisher: The Clinical Journal Of Pain

Oxcarbazepine for neuropathic pain

Source: Cochrane Database of Systematic Reviews - 02 December 2017

Sphenopalatine ganglion: block, radiofrequency ablation and neurostimulation - a systematic review

Source: PubMed - 28 December 2017 - Publisher: The Journal Of Headache And Pain

<u>Oral ulceration and inflammation | Treatment summary</u> Source: British National Formulary - BNF - 11 January 2018

The utility of oral brush cytology in the early detection of oral cancer and oral potentially malignant disorders: A systematic review

Source: PubMed - 12 November 2017 - Publisher: Journal Of Oral Pathology & Medicine: Official Publication Of The International Association Of Oral Pathologists And The American Academy Of Oral Pathology Read Summary

MicroRNAs as effective surrogate biomarkers for early diagnosis of oral cancer

Source: PubMed - 03 January 2018 - Publisher: Clinical Oral Investigations Read Summary

Oral Cavity and Oropharyngeal Cancer Prevention (PDQ®)—Health Professional Version

Source: National Cancer Institute, USA - 12 January 2018

Childhood Oral Cavity Cancer Treatment (PDQ®)—Health Professional Version

Source: National Cancer Institute, USA - 08 January 2018

Lip and Oral Cavity Cancer Treatment (Adult) (PDQ®)—Health Professional Version

Source: National Cancer Institute, USA - 12 January 2018

<u>Oral anticoagulation in people with cancer who have no therapeutic or prophylactic indication for anticoagulation</u>

Source: Cochrane Database of Systematic Reviews - 29 December 2017

How do oral and intravenous fluoropyrimidines compare for people with colorectal cancer treated with palliative intent?

Source: Cochrane Clinical Answers - 20 December 2017



<u>Interventions for preventing oral mucositis in patients with cancer receiving treatment: cytokines</u> and growth factors

Philip Riley , Anne-Marie Glenny , Helen V Worthington , Anne Littlewood , Luisa M Fernandez Mauleffinch , Jan E Clarkson and Martin G McCabe

Online Publication Date: November 2017

### **UpToDate®**

OpenAthens login required. Register here: <a href="https://openathens.nice.org.uk/">https://openathens.nice.org.uk/</a>

Oral lichen planus: Management and prognosis

Literature review current through: Dec 2017. | This topic last updated: Jul 31, 2017.

**Oral lesions** 

Literature review current through: Dec 2017. | This topic last updated: Sep 20, 2017.

Overview of craniofacial pain

Literature review current through: Dec 2017. | This topic last updated: Aug 25, 2017.



The British Society for Oral Medicine

**CLINICAL CARE • RESEARCH • EDUCATION** 

#### **Trigeminal Neuralgia - Pain Control**

Professor Zakrzewska at the Eastman Dental Institute, London is leading a <u>clinical trial</u> to see if a new drug has a role in the control of Trigeminal Neuralgia pain.

#### **Relieving Dry Mouth**

Professor Stephen Porter and Dr Stefano Fedele at the Eastman Dental Institute, London are leading a <u>clinical trial</u> for a new treatment for mouth dryness.

<u>Speeding up Mouth Cancer Detection</u> Professor Martin Thornhill in Sheffield along with colleagues in Rice University in the USA is undertaking a clinical trial using 'lab on a chip' technology for the rapid testing of mouth lesions that may be cancer.

#### **Treatment Choice – The Evidence**

Many BSOM members in different centres in the UK and Ireland have been involved in systematic reviews within the <u>Cochrane Oral Health Group</u> based in Manchester or participate in the World Workshops on Oral Medicine.

#### **Undergraduate Education**

The Society is preparing a curriculum for undergraduate dental students to support common goals being achieved by new graduates.

#### **Postgraduate Qualifications**

For opportunities at any particular time contact the leads for Education in the individual <u>Oral</u> <u>Medicine Units</u> listed on this Web.

#### **Recent Database Articles on Oral Medicine**

Below is a selection of articles recently added to the healthcare databases, grouped into the following categories:

Trigeminal neuralgia/orofacial pain/burning mouth syndrome

**Oral ulceration** 

**Potentially malignant lesions** 

If you would like any of the following articles in full text, or if you would like a more focused search on your own topic, then get in touch: <a href="mailto:library@uhbristol.nhs.uk">library@uhbristol.nhs.uk</a>

## Trigeminal neuralgia, Oro-facial pain and Burning mouth syndrome

The prevalence of oral stage dysphagia in adults presenting with temporomandibular disorders: a systematic review and meta-analysis.

Author(s): Gilheaney, Órla; Béchet, Sibylle; Kerr, Patrick; Kenny, Ciaran; Smith, Shauna; Kouider, Rita

Source: Acta odontologica Scandinavica; Jan 2018; p. 1-11

**Publication Type(s):** Journal Article

Abstract:OBJECTIVETemporomandibular disorders (TMDs) are the most commonly experienced non-dental orofacial pain disorders, with pain and dysfunction potentially resulting in oral stage dysphagia (OD). However, limited research has been conducted on this condition, with potential negative effects on clinical practice. Therefore, the aim of this study was to determine the prevalence of OD in adults presenting with TMDs, diagnosed as per the Research Diagnostic Criteria for Temporomandibular Disorders or the Diagnostic Criteria for Temporomandibular Disorders protocols.MATERIAL AND METHODSA systematic review of the literature was completed. Nine electronic databases were searched from inception to January 2017, with no date/language restriction applied. Grey literature, conference proceedings, and reference lists were also searched.

Studies presenting original data regarding OD prevalence in adults presenting with TMDs were included if they investigated impaired swallowing, mastication, masticatory pain or fatigue, or weight loss. Study eligibility and quality were assessed by two independent reviewers. Methodological quality was assessed using the Down's and Black tool.RESULTS AND CONCLUSIONSThis search yielded 20 eligible studies. Swallowing itself was impaired in only 9.3% of patients with TMDs. A range of additional OD signs and symptoms were also commonly reported (e.g. masticatory pain (87.4%) and fatigue (62%)). Study limitations included the small number of studies which were eligible for inclusion. As signs and symptoms of OD are frequently reported by patients with TMDs, psychometrically robust prospective research is warranted to determine current and optimal management of this condition.

### Management of Reticular Oral Lichen Planus patients with Burning Mouth Syndrome-like oral symptoms: a pilot study.

Author(s): Adamo, Daniela; Mignogna, Michele Davide; Pecoraro, Giuseppe; Aria, Massimo;

**Source:** The Journal of dermatological treatment; Jan 2018; p. 1-24

Publication Type(s): Journal Article

Abstract:OBJECTIVESWe sought to determine the efficacy of psychotropic drug in the management of BMS-like oral symptoms in patients with reticular oral lichen planus (R-OLP) refractory to conventional therapies, and its impact on anxious and depressive symptoms.MATERIALS AND METHODSWe enrolled 28 cases of symptomatic R-OLP. The Numeric Rating Scale (NRS), the Total Pain Rating Index (T-PRI), the Hamilton rating scales for Depression (HAM-D) and Anxiety (HAM-A) were performed at baseline (time 0), after 2 months of topical clonazepam (time 1) and after six months of benzodiazepine and antidepressant drugs (time 2).RESULTSR-OLP patients showed a statistically significant improvement in the NRS and T-PRI scores from time 0 [Median: 9.0 (IQR: 7.2-10.0) and 10.5 (IQR: 7.0-13.0), respectively] to time 2 [(Median: 2.0 (IQR: 2.0-3.0) (p< 0.001) and 3.0 (IQR: 2.0-4.7) (p< 0.001), respectively]. Similarly, the HAM-A and HAM-D scores showed an improvement from time 0 [(Median: 15.0 (IQR: 10.2-17.8) and 13.0 (IQR: 12.0-15.0), respectively] to time 2 [Median: 6.0 (IQR: 4.0-7.0) (p< 0.001) and 5.5 (IQR: 4.25-6.0) (p< 0.001), respectively].CONCLUSIONSPsychotropic drugs turned out to be effective in the management of BMS-like oral symptoms in R-OLP patients refractory to conventional immunosuppressive therapy, although in a long-term period.

### Candida species in patients with oral dysesthesia: A comparison of carriage among oral disease states.

Author(s): Farah, Camile S; Amos, Kate; Leeson, Rachel; Porter, Stephen

**Source:** Journal of oral pathology & medicine: official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology; Jan 2018

**Publication Type(s):** Journal Article

**Abstract:**OBJECTIVESOral dysesthesia (burning mouth syndrome) is characterized by a burning-like sensation of the oral mucosa. The etiology of this disorder is still unknown, however, associations with oral fungal carriage have been proposed and applied clinically. The aim of the this study was to compare oral Candida carriage in patients with oral dysesthesia with Candida carriage in patients with other commonly diagnosed oral diseases to clarify the relationship between Candida and oral dysesthesia. SUBJECTS AND METHODSIn total, 441 patients in total including 79 patients diagnosed with oral dysesthesia were included in this study. A retrospective analysis of mycological investigations undertaken in patients with clinically diagnosed oral dysesthesia compared with other oral conditions was undertaken. RESULTSOral carriage of Candida was found in 63.3% (50 of 79) of patients with oral dysesthesia. The frequency of carriage and oral load of Candida were not significantly increased in patients with oral dysesthesia relative to the other conditions assessed.

Patients with clinical signs of fungal infection or xerostomia presented with increased carriage of Candida. CONCLUSIONThere is no association between oral dysesthesia and the presence or load of oral Candida.

#### Headaches and facial pain in rhinology.

Author(s): Jayawardena, Asitha D L; Chandra, Rakesh

Source: American journal of rhinology & allergy; Jan 2018; vol. 32 (no. 1); p. 12-15

Publication Type(s): Journal Article

Available at American journal of rhinology & allergy - from EBSCO (MEDLINE Complete)

Abstract:"Sinus headache" is a common chief complaint that often leads patients to an otolaryngologist's office. Because facial pain may or may not be sinogenic in origin, the otolaryngologist should be equipped to evaluate and treat or to appropriately refer these patients. Analysis of current data indicates that the majority of patients who present with sinus headaches actually have migraines. Furthermore, the downstream effect of the cytokine cascade initiated in migraine physiology can cause rhinologic symptoms, including rhinorrhea, congestion, and lacrimation, which may also confound diagnosis. Other causes of sinus headache include the following: cluster headaches, Sluder neuralgia, trigeminal neuralgia, myofascial trigger point pain (tension headaches, temporomandibular joint dysfunction), and contact point headaches. The diagnostic dilemma for an otolaryngologist occurs when a patient has facial pain and symptoms that may indicate chronic rhinosinusitis but with nondiagnostic endoscopy. Traditionally, these patients have been primarily managed with empiric antibiotics. An alternative strategy is to first screen these patients with an upfront computed tomography. This algorithm may ultimately decrease cost; avert unnecessary antibiotics prescriptions; and prompt more timely referrals to other, more appropriate, disciplines, such as neurology, dentistry, and/or pain management specialists.

### Quantitative sensory testing for assessment of somatosensory function in human oral mucosa: a review.

Author(s): Zhou, Pin; Chen, Yaming; Zhang, Jinglu; Wang, Kelun; Svensson, Peter

Source: Acta odontologica Scandinavica; Jan 2018; vol. 76 (no. 1); p. 13-20

Publication Date: Jan 2018

Publication Type(s): Journal Article

**PubMedID:** 28929829

**Abstract**:OBJECTIVEThis narrative review provides an overview of the quantitative sensory testing (QST) to assess somatosensory function in human oral mucosa.MATERIAL AND METHODSA literature search was conducted in the PubMed database to identify studies in vivo on human oral mucosa using QST methods. A list of 149 articles was obtained and screened. A total of 36 relevant articles remained and were read in full text. Manual search of the reference lists identified eight additional relevant studies. A total of 44 articles were included for final assessment.RESULTSThe included studies were divided into six categories according to the study content and objective. In each category, there was a great variety of aims, methods, participants and outcome measures. The application of QST has nevertheless helped to monitor somatosensory function in experimental models of intraoral pain, effects of local anesthesia, after oral and maxillofacial surgery and after prosthodontic and orthodontic treatment.CONCLUSIONSQST has been proved to be sufficiently stable and reliable, and valuable information has been obtained regarding somatosensory function in healthy volunteers, special populations and orofacial pain patients. However, as most of the studies were highly heterogeneous, the results are difficult to compare quantitatively. A

standardized intraoral QST protocol is recommended and expected to help advance a mechanism-based assessment of neuropathies and other intraoral pain conditions.

Clinical characterization of women with burning mouth syndrome in a case-control study.

Author(s): Acharya, Shikha; Carlén, Anette; Wenneberg, Bengt; Jontell, Mats; Hägglin, Catharina

Source: Acta odontologica Scandinavica; Dec 2017; p. 1-8

**Publication Type(s):** Journal Article

Abstract:OBJECTIVEBurning mouth syndrome (BMS) is a chronic orofacial pain disorder that is defined by a burning sensation in the oral mucosa. The aim of this study was to investigate the underlying factors, clinical characteristics and self-reported oral and general health factors associated with BMS.MATERIAL AND METHODSFifty-six women with BMS (mean age: 67.7) and their age-matched controls were included in the study. A general questionnaire, an OHRQL index and BMS-specific questionnaires were used. Each subject underwent an oral examination.RESULTSThe mean severity of the BMS symptoms (VAS, 0-100) was 66.2 (SD 19.7). Overall, 45% of the patients reported taste disturbances. More of the patients than the controls rated their general health, oral health and life situation as 'less satisfactory'. The patients also reported more frequently on-going medications, diseases/disorders, xerostomia, allergy and skin diseases. Except for more bruxofacets among the patients, there were no significant differences regarding signs of parafunction. In a multiple logistic regression analysis, xerostomia and skin diseases showed the strongest prediction for BMS and no significant effect was found for medication, allergy or bruxofacets.CONCLUSIONSSkin diseases and xerostomia but not parafunction were strongly associated with BMS. Our findings provide the basis for additional studies to elucidate the causal factors of BMS.

#### Prevalence and Predictors of Sjögren's Syndrome in Patients with Burning Mouth Symptoms.

Author(s): Lee, Young Chan; Song, Ran; Yang, You-Jung; Eun, Young-Gyu

Source: Journal of oral & facial pain and headache; Dec 2017

Publication Type(s): Journal Article

Abstract: AIMSTo investigate the prevalence and predictive factors of Sjögren's syndrome (SS) in a cohort of patients with burning mouth symptoms. METHODSA total of 125 patients with burning mouth symptoms were enrolled in a prospective study and assessed for the presence of SS. The severity of oral symptoms was evaluated by using questionnaires. Salivary flow rates and salivary scintigraphy were used to evaluate salivary function. Patient laboratory work-ups were reviewed, and SS was diagnosed by a rheumatologist based on the American-European Consensus Group criteria. The differences between the SS patient group and the non-SS patient group were analyzed with chi-square test or t test.RESULTSA total of 12 of the 125 enrolled patients (9.5%) had a positive autoimmune antibody test, and 6 (4.8% of the entire cohort) had SS (4 [3.2%] primary and 2 [1.6%] secondary). Patients with SS exhibited significantly decreased hemoglobin levels, an increased erythrocyte sedimentation rate, and an increased prevalence of autoantibody positive results compared to non-SS patients. Salivary scintigraphy showed that the uptake ratio of the submandibular gland in SS patients was decreased significantly. CONCLUSIONThe prevalence of SS in patients with burning mouth symptoms was 4.8%. Therefore, clinicians who treat patients with burning mouth symptoms should evaluate laboratory findings and salivary functions to identify patients with SS.

Oral surgery II: Part 5. Chronic orofacial pain.

Author(s): Renton, T

Source: British dental journal; Dec 2017; vol. 223 (no. 11); p. 826-836

Publication Type(s): Journal Article

**Abstract:**Chronic orofacial pain syndromes represent a diagnostic challenge for any practitioner. Patients are frequently misdiagnosed or attribute their pain to a prior event such as a dental procedure, ENT problem or facial trauma. Psychiatric symptoms of depression and anxiety are prevalent in this population and compound the diagnostic conundrum. Treatment is less effective than in other pain syndromes and thus often requires a multidisciplinary approach to address the many facets of these conditions.

### Secondary hyperparathyroidism causing increased jaw bone density and mandibular pain: a case report.

**Author(s):** Aerden, Thomas; Grisar, Koenraad; Nys, Margaux; Politis, Constantinus **Source:** Oral surgery, oral medicine, oral pathology and oral radiology; Dec 2017

Publication Type(s): Journal Article

Abstract:We present the case of a 32-year-old male patient complaining of recurrent mandibular pain for 3.5 years. Panoramic radiography indicated increased cortical density of the mandibular lower border. Scintigraphy and single-photon emission computed tomography revealed metabolic hyperactivity in that region without pathologic lymph nodes. A bone biopsy specimen of the mandibular lower border did not have inflammation or cytologic atypia. Endocrinologic investigation confirmed secondary hyperparathyroidism as a result of hypovitaminosis D. Several weeks after starting therapy with oral vitamin D supplements, the symptoms completely disappeared. Increased cortical density is a rare manifestation of secondary hyperparathyroidism, which normally causes the lamina dura to vanish and produces a ground-glass appearance as a result of blurring of the trabecular bone pattern. Because focal hyperostosis can have multiple benign or malignant causes, radiologic examination of the jaw bones is indispensable for evaluating orofacial pain. Increased cortical density may be caused by metabolic diseases, requiring further investigations, including biopsy and blood analysis.

### Refractory burning mouth syndrome: clinical and paraclinical evaluation, comorbiities, treatment and outcome.

**Author(s):** Mitsikostas, Dimos D; Ljubisavljevic, Srdjan; Deligianni, Christina I **Source:** The journal of headache and pain; Dec 2017; vol. 18 (no. 1); p. 40

**Publication Type(s):** Journal Article

Available at The journal of headache and pain - from EBSCO (MEDLINE Complete)

**Abstract:**BACKGROUNDBurning Mouth Syndrome (BMS) is a chronic pain condition characterized by persistent intraoral burning without related objective findings and unknown etiology that affects elderly females mostly. There is no satisfactory treatment for BMS. We aimed to observe the long-term efficacy of high velanfaxine doses combined with systemic and topical administered clonazepam in a particular subgroup of BMS patients who do not respond to current clinical management.RESULTSEight ( $66.1 \pm 6.2$  years old females) out of 14 BMS patients fulfilled the inclusion criteria and were treated with venlafaxine (300 mg/d) and clonazepam (5 mg/d) for  $35.4 \pm 12.1$  (mean  $\pm$  SD) months. The average duration of the symptoms at baseline was  $4.3 \pm 1.4$  years and the overall mean daily pain intensity score was  $8.6 \pm 1.3$  (VAS); pain was in tongue and within the oral mucosa, accompanying by oral and facial dysesthesia. In five patients tasting was abnormal. All patients had positive history of concomitant primary headache. The average score of Hamilton Rating scale for Anxiety and Depression was  $21 \pm 4.2$ , and  $26.1 \pm 2.9$ , respectively. Previous

ineffective treatments include anticonvulsants and anti-depressants. All patients responded (more than 50% decrease in VAS) after three months treatment (mean VAS  $3.2 \pm 2.2$ ) with no remarkable adverse events. CONCLUSIONBMS deserves bottomless psychiatric evaluation and management when current available treatments fail. Treatment with venlafaxine combined with topical and systemic clonazepam may be effective in refractory BMS cases but further investigation in a large-scale controlled study is needed to confirm these results.

#### Orofacial pain and headaches associated with exfoliation glaucoma.

**Author(s):** Noma, Noboru; Iwasa, Mayumi; Young, Andrew; Ikeda, Mariko; Hsu, Yung-Chu **Source:** Journal of the American Dental Association (1939); Dec 2017; vol. 148 (no. 12); p. 936-940 **Publication Type(s):** Journal Article

Abstract:BACKGROUND AND OVERVIEWExfoliation syndrome is the most common identifiable cause of open-angle glaucoma. The authors report a case of exfoliation glaucoma in a patient who had orofacial pain.CASE DESCRIPTIONA 77-year-old woman was treated at the orofacial pain clinic for left-sided facial pain and headaches of 7 months' duration. Her cataracts and open-angle glaucoma had been diagnosed approximately 3 years earlier. Her main symptoms were orofacial pain, eye redness, inflammation of the eyelids, and eyelid edema. Magnetic resonance imaging showed no evidence of intracranial or extracranial pathology. Hemicrania continua was considered as a possible diagnosis. Indomethacin was prescribed but did not affect her headaches. She then went to an ophthalmologist to rule out secondary headaches. Intraocular pressure was 13 millimeters of mercury in the right eye and 67 mm Hg in the left eye. The ophthalmologist made a diagnosis of exfoliation glaucoma, and the patient underwent surgical treatment for the glaucoma and cataracts. After surgery, she was free of symptoms, and intraocular pressure was 15 mm Hg in the left eye.CONCLUSIONS AND PRACTICAL IMPLICATIONSDuring differential diagnosis, dentists need to consider intraoral and systemic conditions that can mimic odontogenic or orofacial pain disorders in the patient's medical history and that have a higher incidence associated with the patient's age.

### Plasma IL-8 signature correlates with pain and depressive symptomatology in patients with burning mouth syndrome: Results from a pilot study.

**Author(s):** Barry, Alison; O'Halloran, Ken D; McKenna, Joseph P; McCreary, Christine; Downer, Eric J **Source:** Journal of oral pathology & medicine: official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology; Dec 2017

#### Publication Type(s): Journal Article

**Abstract:**BACKGROUNDBurning mouth syndrome (BMS) is a neuropathic orofacial pain condition of unknown aetiology that encompasses intra-oral burning pain without abnormal clinical findings. Psychological, neural and inflammatory processes are associated with BMS pathogenesis. Currently, studies characterising plasma cytokine/chemokine profiles with pain and depression in patients with BMS are lacking. Considering that inflammation is associated with the pathophysiology of BMS, and that inflammation is closely associated with pain and depression, we aimed to correlate depressive symptomatology and oral cavity pain with plasma cytokine/chemokine signatures in a cohort of patients with BMS.METHODSIn this study, plasma protein levels of Th1 cytokines (IFN- $\gamma$ , IL-2, IL-12p70, TNF- $\alpha$ ), Th2 cytokines (IL-4, IL-10, IL-6, IL-13) and the chemokine IL-8 were assessed in patients with BMS (n = 10) and healthy volunteers (n = 10), using pro-inflammatory-10-plex assays. Clinical histories, alongside self-rated oral cavity pain intensities and depressive symptomatology were assessed using a visual analogue scale and the 16-item Quick Inventory of Depressive Symptomatology questionnaires, respectively.RESULTSWe present evidence that BMS is associated with increased depressive symptomatology and enhanced oral cavity pain. Plasma isolated from BMS patients display enhanced expression of the pro-inflammatory chemokine IL-8, when compared

to plasma from healthy individuals. Plasma IL-8 signature correlates with pain and depressive symptomatology in the study cohort.CONCLUSIONSOverall, these findings indicate that plasma IL-8 profiles are dysregulated in BMS and that modulation of IL-8 production in the disorder may be a tool in the management of BMS symptomatology.

#### The alpha-herpesviridae in dermatology: Herpes simplex virus types I and II.

Author(s): El Hayderi, L; Rübben, A; Nikkels, A F

Source: Der Hautarzt; Zeitschrift fur Dermatologie, Venerologie, und verwandte Gebiete; Dec 2017;

vol. 68; p. 1-5

Publication Type(s): Journal Article Review

Abstract:This review on herpes simplex virus type I and type II (HSV-I, HSV-II) summarizes recent developments in clinical manifestations and treatment interventions for primary and recurrent orolabial and genital herpes, as well as those regarding vaccination issues. Among the clinical presentations, the relationship between pyogenic granuloma and chronic HSV-I infection; HSV-related folliculitis; verrucous HSV-I and HSV-II lesions; the role of recurrent HSV-I infection in burning mouth syndrome; HSV-I and HSV-II infection of the periareolar area; zosteriform HSV; the "knife-cut sign"; and the preferential colonization and infection of preexisting dermatoses by HSV-I or HSV-II are discussed. The usual antiviral treatment regimens for primary and recurrent orolabial and genital herpes are compared to short-term and one-day treatment options. New anti-HSV-I and anti-HSV-II agents include amenavir, pritelivir, brincidofovir, valomaciclovir, and FV-100. Therapeutic or preventive vaccination against HSV-I and HSV-II infections still remains a highly desirable treatment aim, which, unfortunately, has no clinically relevant applications to date.

#### Orofacial pain - an update on diagnosis and management.

Author(s): Ghurye, S; McMillan, R

**Source:** British dental journal; Dec 2017; vol. 223 (no. 9); p. 639-647

**Publication Type(s):** Journal Article

Abstract: The diagnosis and management of orofacial pain may be challenging due to complex histories, pathophysiology and associated psychosocial co-morbidities such as depression and anxiety. Neuropathic facial pain conditions such as burning mouth syndrome (BMS), persistent idiopathic facial pain (PIFP), atypical odontalgia (AO) and trigeminal neuralgia (TN) require early recognition by primary care clinicians and referral to secondary care. Acute pain-related temporomandibular disorder (TMD) may be managed in the primary care setting, with identification of those at risk of developing chronic TMD receiving an early referral to secondary care. Adopting a biopsychosocial approach, consisting of physical therapies, pharmacotherapy and psychological support can lead to effective management and may limit the negative impact of facial pain upon quality of life and daily functioning.

### Merits of oil pulling therapy in the management of xerostomia and stomatopyrosis in burning mouth syndrome

Author(s): Garg A.; Bhatnagar A.; Tayal S.; Singh U.P.

Source: Journal of Clinical and Diagnostic Research; Dec 2017; vol. 11 (no. 12)

Publication Type(s): Article

Available at Journal of Clinical and Diagnostic Research - from Europe PubMed Central - Open Access

Abstract:Introduction: Burning Mouth Syndrome (BMS) is a condition which is characterised by xerostomia, stomatopyrosis, dysgeusia and primarily affects the women of perimenopausal age. Despite the plethora of trials that have been going on since decades for management of this condition, there seems to be no definitive cure till date, which is mainly attributed to the ambiguity of this condition. Oil pulling is a simple, ancient technique which can be used as an adjunctive or supplemental therapy in a number of conditions, including BMS. Aim: To assess the efficacy of oil pulling therapy using sesame oil on xerostomia and stomatopyrosis in patients suffering from primary BMS. Materials and Methods: It is a prospective study conducted at I.T.S. Dental College, Greater Noida between April 2016 to April 2017 and included total 25 patients. On the basis of detailed case history and complete haemogram, patients clinically diagnosed with primary BMS were advised oil pulling therapy once daily for a period of three months and symptoms of xerostomia and stomatopyrosis were assessed at the end of every month using VAS scale. Paired t-test was applied. The level of significance was set at p<0.05. The software used for analysis was SPSS software version 16.0. Results: All patients showed a statistically significant improvement in symptoms of both xerostomia and stomatopyrosis at the end of three months when compared with the baseline values (p=<0.05). Conclusion: Oil pulling therapy using sesame oil is found to be a simple yet effective modality with no harmful side effects, which can be advised to patients of BMS. Copyright © 2017, Journal of Clinical and Diagnostic Research. All rights reserved.

#### Symptoms and signs of temporomandibular disorders among elderly Vietnamese

Author(s): Nguyen M.S.; Jagomagi T.; Saag M.; Voog-Oras U.; Nguyen T.

Source: Proceedings of Singapore Healthcare; Dec 2017; vol. 26 (no. 4); p. 211-216

Publication Type(s): Article

Abstract: Background: To assess the prevalence of the symptoms and signs of temporomandibular disorders (TMDs) and determine the prevalence of TMDs among elderly Vietnamese aged 65-74 years old. Methods: A cross-sectional study was conducted among 258 participants aged 65-74 years old (128 females and 130 males) using two strategies for TMD diagnosis: a clinical examination of the temporomandibular joint and its associated structures using the Diagnostic Criteria for Temporomandibular Disorders Axis I; and a set of 14 questions regarding TMD symptoms to obtain anamnestic data. Results: The prevalence of TMD symptoms was: headache 49.6%; temporomandibular joint noise 28.0%; orofacial pain 25.2%; jaw locking 3.1%; 62.5% of participants had at least one TMD symptom. Headaches were more prevalent in females than males (p=0.009) and rural than urban residents (p<0.001). The most frequent signs were temporomandibular joint crepitus (50.4%), clicking (48.1%) and mouth-opening deviation (37.6%). Temporomandibular joint crepitus and mouthopening deviation were more frequent among rural than urban (p=0.024 and p<0.001, respectively). TMD was found in 56.6% of the total sample. Of the TMD sufferers, 37.6% were diagnosed with disc displacement, 34.9% with degenerative joint disease, 3.5% with myalgia and 1.2% with arthralgia. Conclusions: More than half of elderly Vietnamese have at least one TMD symptom. TMD sounds were the most common clinical sign of TMD. There were no differences between the genders or place of residence and TMD diagnosis. Disc displacement and degenerative joint disease were most prevalent among elderly Vietnamese. Copyright © The Author(s) 2017.

### Potentially inappropriate medications in geriatric population: a clinical update for oral medicine and orofacial pain practitioners.

Author(s): Farag, Arwa; Desai, Bhavik

Source: Oral Surgery, Oral Medicine, Oral Pathology & Oral Radiology; Dec 2017; vol. 124 (no. 6); p.

600-608

Publication Type(s): Academic Journal

Primary burning mouth syndrome: Literature review and preliminary findings suggesting possible association with pain modulation.

Author(s): Nasri-Heir, Cibele; Shigdar, Diana; Alnaas, Deyaaeddin; Korczeniewska, Olga Anna;

Source: Quintessence international (Berlin, Germany: 1985); Nov 2017; p. 49-60

Publication Type(s): Journal Article

**Abstract:**Primary burning mouth syndrome (BMS) is a chronic pain of a burning quality affecting the tongue and intraoral mucosa. Currently, there are no definite diagnostic criteria; therefore, the diagnosis is made by exclusion of potential local and systemic causes that could justify the burning sensation. The etiology behind primary BMS remains unclear; however, the most acceptable theories link primary BMS with neuropathic pain. This article provides a review of primary BMS diagnosis, mechanisms, and treatment with focus on the association of BMS with pain modulation. Preliminary data are presented suggesting a link between primary BMS and a faulty inhibitory pain system.

#### Persistent Dentoalveolar Pain Disorder: A Comprehensive Review.

Author(s): Malacarne, Alberto; Spierings, Egilius L H; Lu, Chao; Maloney, George E

**Source:** Journal of endodontics; Nov 2017 **Publication Type(s):** Journal Article Review

Abstract:INTRODUCTIONPersistent dentoalveolar pain of idiopathic origin represents a diagnostic challenge for the dentist and physician alike. Disagreement on taxonomy and diagnostic criteria presents a significant limit to the advancement of research in the field. Patients struggle with a lack of knowledge by dental and medical professionals, diagnostic delays, and unnecessary treatments.METHODSA PubMed search was performed as of January 1, 2017 by using the terms atypical odontalgia, phantom tooth pain, persistent idiopathic facial pain, painful posttraumatic trigeminal neuropathy, idiopathic toothache, persistent dentoalveolar pain disorder, nonodontogenic tooth pain, and continuous neuropathic orofacial pain. Three hundred forty-five abstracts were screened, and 128 articles that were pertinent to the topic went through full-text reading.RESULTSCase reports and narrative reviews constitute the majority of available literature. Several retrospective case-control studies investigated the clinical characteristics, pathophysiology, and diagnostic processes. Treatment strategies were evaluated in only 7 open-label and 2 randomized controlled trials.CONCLUSIONSPersistent dentoalveolar pain disorder is likely neuropathic in origin, but pathophysiological mechanisms to explain the onset and persistence of the pain are still far from understood. A correct diagnosis should be established before treatments are performed. Researchers should reach an agreement on the diagnostic criteria to enable a coherent research path to better understand the condition and reduce patient suffering.

### The association between Burning Mouth Syndrome and Sleep Disturbance: a case-control multicentre study.

Author(s): Adamo, D; Sardella, A; Varoni, E; Lajolo, C; Biasotto, M; Ottaviani, G; Vescovi, P

**Source:** Oral diseases; Nov 2017 **Publication Type(s):** Journal Article

**Abstract**:OBJECTIVESTo investigate the quality of sleep and the psychological profiles of a large cohort of Italian patients with burning mouth syndrome (BMS) and to clarify the relationships between these variables and pain.METHODSIn this case-control study, 200 patients with BMS versus an equal number of age and sex-matched healthy controls, recruited in 10 Universities, were

enrolled. The Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS), Hamilton Rating Scale for Depression (HAM-D), Hamilton Rating Scale for Anxiety (HAM-A), Numeric Pain Intensity Scale (NRS) and Total Pain Rating Index (T-PRI) were administered. Descriptive statistics, including the Mann-Whitney U test and hierarchical multiple linear regression analysis, were used.RESULTSPoor sleep quality (PSQI≥5) was present in 78.8% (160) patients with BMS. BMS patients had statistically higher scores in all items of the PSQI and ESS than the healthy controls (P <0.001). A depressed mood and anxiety correlated positively with sleep disturbance. The Pearson correlations were 0.570 for the PSQI vs HAM-D (P <0.001) and 0.549 for the PSQI vs HAM-A (P <0.001). Pain intensity (NRS) poorly correlated to sleep quality; the Pearson correlations was 0.162 for the PSQI vs NRS (P 0.021).CONCLUSIONSThe BMS patients showed a poor sleep quality, anxiety and depression, as compared with the controls, highlighting the relationships between oral burning, sleep and mood. This article is protected by copyright. All rights reserved.

### Pain-relieving effects of clonazepam and amitriptyline in burning mouth syndrome: a retrospective study.

Author(s): Fenelon, M; Quinque, E; Arrive, E; Catros, S; Fricain, J C

**Source:** International journal of oral and maxillofacial surgery; Nov 2017; vol. 46 (no. 11); p. 1505-1511

Publication Type(s): Journal Article

Abstract: This retrospective study aimed to evaluate the efficacy of clonazepam and amitriptyline in the treatment of burning mouth syndrome (BMS). A single-centre retrospective cohort study was performed among patients diagnosed with BMS. Either clonazepam or amitriptyline was administered. Patients were asked to evaluate their pain using a 10-point verbal numerical scale (VNS) at baseline, and at 6 weeks and 3 months of treatment. Mean pain-relief values were assessed according to the treatment received using the Kruskal-Wallis test. Thirty-nine patients (85% female) were included. The mean age was 65±10.5years. The mean VNS score at baseline was 7.1±2.0 in patients treated with clonazepam and 7.5±1.1 in those treated with amitriptyline. The mean VNS scores in the clonazepam and amitriptyline groups were 4.9±2.4 and 6.1±2.6, respectively, after 6 weeks of treatment (P=0.498) and 4.4±2.0 and 4.1±2.7, respectively, after 3 months (P=0.509). There was no difference between the two treatments in terms of pain reduction. Clonazepam as well as amitriptyline may be an effective treatment for BMS.

#### Temporomandibular disorders and quality of life among 12-year-old schoolchildren.

Author(s): da Silva, Marina de Faria; Vedovello, Silvia A S; Vedovello Filho, Mario

Source: Cranio: the journal of craniomandibular practice; Nov 2017; vol. 35 (no. 6); p. 392-396

**Publication Type(s):** Journal Article

**Abstract:**OBJECTIVESThe aim of this study was to investigate the association between symptoms of temporomandibular disorders (TMD), quality of life, and malocclusion.METHODSA cross-sectional observational design study was utilized among 248 schoolchildren aged 12 years old. Symptoms of TMD were assessed using the Orofacial Pain and Temporomandibular Disorders Triage Questionnaire, and subjects were further evaluated as oral-health-related quality of life (CPQ11-14), tooth clenching/grinding and malocclusion (Dental Aesthetic Index). Chi-square for independence, Odds Ratio and Mann-Whitney test were used (p = 0.05) statistically.RESULTSStatistically, association was detected between TMD symptoms with pain and worse quality of life (p < 0.0138), and pain with quality of life and clenching/grinding (p = 0.0120 and 0.0007).DISCUSSIONThe symptoms of TMD are associated with pain and teeth clenching, causing a negative impact on schoolchildren's quality of life; thus, a study of the TMD impact on quality of life is justified.

Functional alterations of postcentral gyrus modulated by angry facial expressions during intraoral tactile stimuli in patients with burning mouth syndrome: A functional magnetic resonance imaging study

Author(s): Yoshino A.; Okamoto Y.; Okada G.; Takamura M.; Ichikawa N.; Yamawaki S.; Doi M.

Source: Frontiers in Psychiatry; Nov 2017; vol. 8

Publication Type(s): Article

Available at Frontiers in Psychiatry - from Europe PubMed Central - Open Access

Abstract: Previous findings suggest that negative emotions could influence abnormal sensory perception in burning mouth syndrome (BMS). However, few studies have investigated the underlying neural mechanisms associated with BMS. We examined activation of brain regions in response to intraoral tactile stimuli when modulated by angry facial expressions. We performed functional magnetic resonance imaging on a group of 27 BMS patients and 21 age-matched healthy controls. Tactile stimuli were presented during different emotional contexts, which were induced via the continuous presentation of angry or neutral pictures of human faces. BMS patients exhibited higher tactile ratings and greater activation in the postcentral gyrus during the presentation of tactile stimuli involving angry faces relative to controls. Significant positive correlations between changes in brain activation elicited by angry facial images in the postcentral gyrus and changes in tactile rating scores by angry facial images were found for both groups. For BMS patients, there was a significant positive correlation between changes in tactile-related activation of the postcentral gyrus elicited by angry facial expressions and pain intensity in daily life. Findings suggest that neural responses in the postcentral gyrus are more strongly affected by angry facial expressions in BMS patients, which may reflect one possible mechanism underlying impaired somatosensory system function in this disorder. Copyright © 2017 Yoshino, Okamoto, Doi, Okada, Takamura, Ichikawa and Yamawaki.

#### Oral ulceration

Microvascular imaging and monitoring of human oral cavity lesions in vivo by swept-source OCT-based angiography.

Author(s): Wei, Wei; Choi, Woo June; Wang, Ruikang K

Source: Lasers in medical science; Jan 2018; vol. 33 (no. 1); p. 123-134

Publication Type(s): Journal Article

**Abstract:**We report the development of optical coherence tomography- (OCT) based angiography (OCTA) to image blood flow within microcirculatory tissue beds in human oral cavity in vivo with a field of view at 10 mm × 10 mm. Three-dimensional (3D) structural and vascular images of labial mucosa tissue are obtained at a single 3D acquisition. Pathologic mucosal sites with mouth ulcers are examined using the OCT tomograms and angiograms, upon which to monitor the lesion healing process over a period of 2 weeks. Quantitative metrics of the capillary loop density within the lamina propria layer are evaluated, providing statistically significant difference between healthy and diseased conditions over time. Furthermore, tissue anatomy and vessel morphology of other susceptible sites to ulcer, such as tongue, alveolar mucosa, and labial frenulum, are also imaged to demonstrate the promise of the proposed method as a clinically useful tool for the diagnosis and monitoring of therapeutic treatment of oral tissue abnormalities.

Oral Lymphomatoid papulosis type C: A diagnostic pitfall, often confused with T-cell lymphoma.

Author(s): Schwartz, Ziv; Coleman, Morton; Toyohara, Jennifer P; Freedman, Paul D

Source: Annals of diagnostic pathology; Dec 2017; vol. 31; p. 50-55

Publication Type(s): Journal Article

Abstract: Eosinophilic ulcer of the oral mucosa (EUOM) is a rare, benign, self-resolving lymphoproliferative disorder, which typically presents with asymptomatic to mildly tender ulcers. Histological findings of EUOM are characterized by a polymorphic infiltrate with many eosinophils often extending into the underlying muscle. Although this entity is well documented within the dental literature, it is not well known to physicians. The pathogenesis of the condition is unclear, although reports dating back to 1997 suggest that at least a subset of EUOM represents CD30 positive lymphoproliferative disorder (CD30+ LPD). More specifically the original report and subsequent authors suggest that the patients fall on the spectrum of CD30+ LPD most reminiscent of Lymphomatoid papulosis (LyP) seen in the skin. This oral variant of LyP would be expected to have the same diverse morphologic spectrum as that seen in cutaneous LyP. We present five EUOM patients whose biopsies showed an atypical lymphocytic infiltrate most compatible with Type C LyP, a histologically unique subset of LyP, reminiscent of the biopsy findings encountered in the reported case by Ficarra and co-workers. (Ficarra, et al., 1997) In four of the five cases, the biopsies were interpreted by expert hematopathologists as an aggressive form of peripheral T cell lymphoma resulting in recommendations to administer systemic chemotherapy to four of the patients, the scheduling of one patient for induction therapy and transplantation before revision of the diagnosis, and administration of chemotherapy to one of the patients. The natural clinical course of spontaneous regression refuted the original diagnoses as a form of aggressive peripheral T cell lymphoma. Recognition of oral LyP is critical to avoid inadvertent exposure to potentially toxic chemotherapeutic regimens intended for the treatment of high grade lymphoma.

#### Colchicine is an active treatment for everolimus-induced oral ulcers.

Author(s): Ropert, Stanislas; Coriat, Romain; Verret, Benjamin; Perret, Audrey; Lucibello, Francesca

Source: European Journal of Cancer; Dec 2017; vol. 87; p. 209-211

**Publication Type(s):** Academic Journal

#### Long-Term Effects of G-CSF Therapy in Cyclic Neutropenia.

**Author(s):** Dale, David C.; Bolyard, AudreyAnna; Marrero, Tracy; Makaryan, Vahagn; **Source:** New England Journal of Medicine; Dec 2017; vol. 377 (no. 23); p. 2290-2292

**Publication Type(s):** Academic Journal

Available at New England Journal of Medicine - from Ovid (Journals @ Ovid)

**Abstract:**The article focuses on a study to explore effects of granulocyte colony-stimulating factor (G-CSF) in patients with cyclic neutropenia. It mentions that patients who have been prospectively followed through the Severe Chronic Neutropenia International Registry (SCNIR) showed consistent history of recurrent fevers, mouth ulcers, and infections before the initiation of G-CSF. It also mentions treatment of acute myeloid leukemia (AML) with hematopoietic stem-cell transplantation.

### Osteonecrosis of the Jaw in a Patient Presenting With Post-Transplantation Lymphoproliferative Disorder Treated With Rituximab: A Case Report.

Author(s): Keribin, Pierre; Guerrot, Dominique; Jardin, Fabrice; Moizan, Hervé

Source: Journal of Oral & Maxillofacial Surgery (02782391); Dec 2017; vol. 75 (no. 12); p. 2599-2605

**Publication Type(s):** Academic Journal

**Abstract:**Osteonecrosis of the jaw (ONJ) is a rare but potentially severe condition that can be induced by specific treatments. We report the case of a 69-year-old male kidney transplant recipient

who presented with ONJ 5 years after transplantation. The patient presented with ulcerations of the oral mucosa related to post-transplantation lymphoproliferative disorder, which was treated with rituximab. Subsequently, ONJ developed. Although rituximab treatment cannot be firmly established as the cause of this condition, similar cases of ONJ have been reported after treatment with this monoclonal antibody. This case raises a potential link between rituximab treatment and ONJ and prompts further studies to investigate the potential impact of rituximab on bone angiogenesis.

### Metagenomics of the saliva microbiome in primary Sjogren's syndrome reveals a distinct set of microbes associated with the disease

Author(s): Sharma D.; Scaria V.; Sandhya P.; Surin A.K.; Danda D.; Vellarikkal S.K.; Jayarajan R.

Source: Indian Journal of Rheumatology; Nov 2017; vol. 12 (no. 5)

Publication Type(s): Conference Abstract

Abstract: Objective: Primary Sjogren's syndrome (pSS) is an autoimmune disease characterized by sicca symptoms resulting from salivary and lacrimal gland dysfunction. Salivary gland dysfunction could alter the salivary microenvironment resulting in dysbiosis. We attempted to understand the salivary microbiome in patients with pSS using a metagenome sequencing approach. Methods: Saliva of adult patients suffering from pSS and matched healthy controls was collected in sterile tubes with DNA preserving buffers. All pSS patients fulfilled the 2016 American College of Rheumatology or the European League Against Rheumatism classification criteria. Those with caries, periodontitis, gingivitis, oral ulceration, oral candidiasis, diabetes mellitus, inflammatory bowel disease, liver, renal or peptic ulcer disease, use of antibiotics or dental procedure in preceding 3 months, use of paan, alcohol, tobacco, chewing gums, carbonated drinks were excluded. 16S rRNA sequencing was performed as per standard protocols using barcoded primers. Analysis was done independently using two computational pipelines QIIME and LotuS. Operational Taxonomic Units (OTUs) were assigned. A consensus of the two methods was taken. Results: We performed 16s rRNA sequencing for saliva from 39 pSS and 35 control individuals. The data was demultiplexed and independently analysed on the two pipelines and organisms which were significantly differential between the two sets were considered. Actinomycetaceae, Bifidobacterium, Lactobacillus and Veillonella were consistently elevated in pSS while Leptotrichia was found to be consistently and significantly reduced in pSS (p value <0.05 and fold changes >2). Conclusion: Our analysis revealed a distinct set of organisms was differential in cases in comparison with controls.

#### Investigation of dissolved cellulose in development of buccal discs for oromucosal drug delivery

Author(s): Yildir E.; Sjoholm E.; Preis M.; Sandler N.; Trivedi P.; Trygg J.; Fardim P.

Source: Pharmaceutical Development and Technology; Nov 2017; p. 1-10

Publication Type(s): Article In Press

Abstract: Mucoadhesive formulations have a wide scope of application for both systemic and local treatment of various diseases. In the case of recurrent aphthous stomatitis, to ensure effective therapy, the concentration of corticosteroids, and/or anesthetics at the mouth ulcer side should be maintained with minimal systemic absorption. Therefore, the aim of the study was to investigate cellulose-based formulations, in achieving suitable hardness, mucoadhesiveness, and sustained release of the active ingredients directed towards the mucosa for an extended period of time (~4h). This was examined by creating polymer reinforced cellulose composites which consisted of porous cellulose discs (CD) and different polymer components namely polyethylene glycol 6000 (PEG6000), polyethylene glycol 400 (PEG400), and ethyl cellulose. Empty CDs were formed by dropping dissolved cellulose into coagulation medium. The empty porous CDs were immersed into different drug loading solutions which were prepared by dissolving three different concentrations of triamcinolone acetonide and lidocaine hydrochloride in five different ratios of PEG 6000:PEG

400:ethanol (w:w:w %) solutions. All formulations were investigated regarding drug content, release, hardness, and mucoadhesive properties. The results indicate that the non-dispersing buccal discs had sufficient hardness, drug content and in vitro release properties, but further studies are needed to achieve proper mucoadhesiveness. Copyright © 2017 Informa UK Limited, trading as Taylor & Francis Group

#### A review on Lagerstroemia speciosa

Author(s): Koduru R.L.; Babu P.S.; Varma I.V.; Kalyani G.G.; Nirmala P.

**Source:** International Journal of Pharmaceutical Sciences and Research; Nov 2017; vol. 8 (no. 11); p. 4540-4545

**Publication Type(s):** Review

Abstract:Lagerstroemia speciosa is commonly known as crape myrtle belonging to the Lythraceae family. Lagerstroemia speciosa or Banaba is a medicinal tree traditionally used to lower blood sugar in the body. Its high content of corosolic acid makes it an effective anti-diabetic drug. Banaba is also recommended for kidney, bladder problems and hypertension. Leaves of the species have been traditionally used over thousands of years as folkloric treatment by the native Indians and Japanese for illness, ailments particularly for lowering blood sugar levels and weight loss. The flower extracts of the species has some pharmacological properties like antioxidant and anti-microbial activities, whereas fruit extracts reported anti-nociceptive, anti-diarrhea and cytotoxic activities. Research on leaf extracts reveals that anti-bacterial, anti-viral, anti-inflammatory, anti-obesity, anti-fibrotic, anti-diabetic and xanthine oxidase inhibition, diuretic, decongestant activities and roots are applied for treating mouth ulcers. In addition to that bark is used to relieve the abdominal pains. The species also has essential metals like sodium, potassium, iron, zinc and magnesium which were clinically proved. Thus these reviews will emphasis on the phyto-constituents and biological activities of the plant which will heal and cure mankind for healthy living. Copyright © 2013 are reserved by International Journal of Pharmaceutical Sciences and Research.

#### Oral complications at 6 months after radiation therapy for head and neck cancer

Author(s): Lalla R.V.; Treister N.; Sollecito T.; Schmidt B.; Patton L.L.; Mohammadi K.; Hodges J.S

**Source:** Oral Diseases; Nov 2017; vol. 23 (no. 8); p. 1134-1143

Publication Type(s): Article

**Abstract:**Objective: To examine oral complications 6 months after modern radiation therapy (RT) for head and neck cancer (HNC). Methods: Prospective multicenter cohort study of patients with HNC receiving intensity-modulated radiation therapy or more advanced RT. Stimulated whole salivary flow, maximal mouth opening, oral mucositis, oral pain, oral health-related quality of life (OH-QOL), and oral hygiene practices were measured in 372 subjects pre-RT and 216 subjects at 6 months from the start of RT. Results: Mean stimulated whole salivary flow declined from 1.09 to 0.47 ml/min at 6 months (p <.0001). Mean maximal mouth opening reduced from 45.58 to 42.53 mm at 6 months (p <.0001). 8.1% of subjects had some oral mucositis at 6 months, including 3.8% with oral ulceration. Mean overall pain score was unchanged. OH-QOL was reduced at 6 months, with changes related to dry mouth, sticky saliva, swallowing solid foods, and sense of taste (p <=.0001). At 6 months, there was greater frequency of using dental floss and greater proportion using supplemental fluoride (p <.0001). Conclusions: Despite advances in RT techniques, patients with HNC experience oral complications 6 months after RT, with resulting negative impacts on oral function and quality of life. Copyright © 2017 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd. All rights reserved

giant pseudoaneurysm of coronary artery in a young patient with Behçet's disease.

Author(s): Pu, Lihong; Li, Rongjuan; Xie, Jinjie; Liu, Guowen; Yang, Ya

Source: Echocardiography (Mount Kisco, N.Y.); Nov 2017; vol. 34 (no. 11); p. 1736-1737

**Publication Date:** Nov 2017

**Publication Type(s):** Journal Article

**PubMedID: 29082546** 

**Abstract:**As an uncommon multisystem inflammatory disease, Behçet's syndrome is characterized by mouth and genital ulcers, skin lesions, and eye inflammation, which may also affect joints, blood vessels, central nervous system, or digestive tract. However, the inflammation of coronary artery is relatively rare. We thereby reported a young male of Behçet's syndrome presenting left anterior descending artery pseudoaneurysm with myocardial infarction. Surgical resection was performed with coronary bypass grafting.

#### Oral manifestations of systemic disease.

Author(s): Gaddey, Heidi L.

Source: General Dentistry; Nov 2017; vol. 65 (no. 6); p. 23-29

Publication Type(s): Academic Journal

Abstract:On examination, the oral cavity may exhibit manifestations of underlying systemic disease and serve as an indicator of overall health. Systemic diseases with oral findings include autoimmune, hematologic, endocrine, and neoplastic processes. Autoimmune disease may manifest as oral ulcerations, changes in the salivary and parotid glands, and changes in the tongue. Patients with hematologic illnesses may present with gingival bleeding or tongue changes such as glossitis, depending on the etiology. Oral changes associated with endocrine illness are variable and depend on the underlying condition. Neoplastic changes include metastatic lesions to the bony and soft tissues of the oral cavity. Patients with chronic diseases such as gastroesophageal reflux and eating disorders may present with dental erosions that cause oral pain or halitosis. In the pediatric population, oral changes can be related to rare cancers, such as Langerhans cell histiocytosis, or infectious etiologies, such as Kawasaki disease. In both adults and pediatric patients, poor oral health has been linked to poorer health outcomes overall. Thorough history taking and physical examination by dentists may aid in determining the underlying etiology of oral changes and allow for earlier intervention by medical colleagues.

### Association study of interleukin-1 family, interleukin-6, and its receptor gene polymorphisms in patients with recurrent aphthous stomatitis.

**Author(s):** Izakovicova Holla, Lydie; Valova, Simona; Borilova Linhartova, Petra; Bartova, Jirina; Petanova, Jitka; Kuklinek, Pavel; Fassmann, Antonin

Source: Journal of Oral Pathology & Medicine; Nov 2017; vol. 46 (no. 10); p. 1030-1035

**Publication Type(s):** Academic Journal

**Abstract**:Background: Recurrent aphthous stomatitis (RAS) is one of the most common oral chronic ulcerative disease in which proinflammatory cytokines such as interleukin-1 (IL-1) and interleukin-6 (IL-6) are thought to play an important role. The aim of this study was to investigate the possible association between polymorphisms in the IL-1 cytokine family, IL-6 or its receptor and RAS in the Czech population.Methods: A total of 248 subjects, 184 healthy controls, and 64 patients with RAS were genotyped for IL-1A-889C>T, IL-1B-511C>T, IL-1B+3953C>T, IL-1RN86 bp variable number of tandem repeats (VNTRs) in intron 2, IL-6-597G>A, IL-6-572G>C, IL-6-174G>C, and IL-6R+48992A>C by polymerase chain reaction (PCR) methods.Results: No significant differences between investigated polymorphisms in healthy subjects and patients with RAS were detected (P>.05). In addition,

complex analysis also revealed similar IL-1 or IL-6 haplotype frequencies between both groups (P>.05). Conclusions: In conclusion, IL-1 and IL-6 or its receptor gene variants cannot be used as markers for identification of Czech patients with increased risk of recurrent aphthous stomatitis.

### **Potentially malignant lesions**

Prevalence of oral cancer, oral potentially malignant disorders and other oral mucosal lesions in Cambodia.

Author(s): Chher, Tepirou; Hak, Sithan; Kallarakkal, Thomas George; Durward, Callum

Source: Ethnicity & Health; Jan 2018; vol. 23 (no. 1); p. 1-15

Publication Type(s): Academic Journal

Abstract: Objectives: To obtain data on the prevalence of oral mucosal lesions (OMLs) among Cambodians, and to assess the relationship between known risk habits of oral diseases with prevalence of oral potentially malignant disorders (OPMDs). Design: This was a population-based, cross-sectional study whereby subjects were adults aged 18 years old and above. A workshop on the identification of OML was held to train and calibrate dental officers prior to data collection in the field. Sociodemographic and risk habits data were collected via face-to-face interview, whilst presence of OML and clinical details of lesions such as type and site were collected following clinical oral examination by the examiners. Data analysis was carried out using the Statistical Package for Social Science (SPSS) version 12.0. The association between risk habits and risk of OPMD was explored using logistic regression analysis. Results: A total of 1634 subjects were recruited. Prevalence of OML for this population was 54.1%. Linea alba was the most common lesion seen (28.7%). This study showed an overall OPMD prevalence of 5.6%. The most common type of OPMD was leukoplakia (64.8%), followed by lichen planus (30.8%). Subjects who only smoked were found to have an increased risk for OPMD of almost four-fold (RR 3.74, 95%CI 1.89–7.41). The highest risk was found for betel quid chewers, where the increased risk observed was more than six times (RR 6.75, 95%CI 3.32-13.72). Alcohol consumption on its own did not seem to confer an increased risk for OPMD, however when practiced concurrently with smoking, a significant risk of more than five times was noted (RR 5.69 95%CI 3.14-10.29). Conclusion: The prevalence of OML was 54.1%, with linea alba being the most commonly occurring lesion. Smoking, alcohol consumption and betel quid chewing were found to be associated with the prevalence of OPMD, which was 5.6%.

Biological significance of 5-hydroxymethylcytosine in oral epithelial dysplasia and oral squamous cell carcinoma.

Author(s): Cuevas-Nunez, Maria Carolina; Gomes, Camilla Borges F.; Woo, Sook-Bin;

**Source:** Oral Surgery, Oral Medicine, Oral Pathology & Oral Radiology; Jan 2018; vol. 125 (no. 1); p. 59-59

Publication Type(s): Academic Journal

**Abstract:**Objectives: The aim of this study was to determine the levels of 5-hydroxylmethylcytosine (5-hmC) in oral epithelial dysplasia (OED) and oral squamous cell carcinoma (OSCC) compared with those in benign, reactive inflammatory lesions and to explore whether DNA hydroxymethylation may serve as a novel biomarker for early diagnosis and prognosis of OSCC.Study Design: The study included normal mucosa from uninvolved margins of 9 fibromas, 10 oral lichen planus, 15 OED, and 23 OSCC. Cultured human keratinocyte lines from benign oral mucosa, OED, and OSCC, as well as a murine model in which OSCC was induced with 4-nitroquinoline-1-oxide, were also evaluated.Results: Progressive loss of 5-hmC from benign oral mucosal lesions to OED and OSCC was documented in patient samples. Decreased levels in 5-hmC that typify OED and OSCC were also

detectable in human cell lines. Moreover, we characterized similar alterations in 5-hmC in an animal model of OED/OSCC.Conclusions: This study demonstrated that 5-hmC distinguishes OED and OSCC from benign lesions with high sensitivity and specificity. Consequently, loss of 5-hmC may be useful for the diagnosis of OED with potential implications for therapy of OSCC.

#### A clinical diagnosis of oral leukoplakia; A guide for dentists.

Author(s): Carrard, V-C; van der Waal, I

Source: Medicina oral, patologia oral y cirugia bucal; Jan 2018; vol. 23 (no. 1); p. e59

**Publication Type(s):** Journal Article

Available at Medicina oral, patologia oral y cirugia bucal - from Europe PubMed Central - Open Access

Abstract:BACKGROUNDIn view of the many white or predominantly white lesions of the oral mucosa it is a challenge for dentists to clinically identify a leukoplakia, being a potentially (pre)malignant lesion.MATERIAL AND METHODSBased on the available literature and experience of the authors the parameters of a clinical diagnosis of oral leukoplakia have been studied.RESULTSA guide has been presented that should help dentists to establish a clinical diagnosis of leukoplakia as accurate as possible.CONCLUSIONSProbably in most parts of the world dentists will need the help of a specialist for confirmation or exclusion of the clinical diagnosis of oral leukoplakia and for further management of the patient, including patient information.

#### Patient understanding of commonly used oral medicine terminology.

Author(s): Hayes, E; Dua, R; Yeung, E; Fan, K

Source: British dental journal; Jan 2018; vol. 223 (no. 11); p. 842-845

Publication Type(s): Journal Article

Abstract:Introduction Communication within the doctor-patient relationship is complex due to a variety of reasons; a patient's understanding may not correspond with the clinician's vocabulary, resulting in misunderstanding, anxiety and ill-informed decision making. We investigated the understanding of terminology commonly used in oral and maxillofacial surgery and oral medicine clinics. Methods We investigated patients' understanding using a questionnaire-based study in the out-patient setting. Age, gender, first language and highest educational level were recorded. The questionnaire included multiple choice questions regarding patients' understanding of words as well as asking patients to define certain terms. Vocabulary included 'ulcer', 'blister', 'cancer', 'malignant' and 'benign'. Results and conclusions Many patients have difficulty in understanding and explaining commonly used terminology. 'Blister' was the most commonly understood term, while 'benign' and 'lesion' were the least well understood. 'Tumour' was mistakenly thought of as synonymous with 'malignancy' by over a third of patients. Understanding was better among those for whom English was their first language. It is essential that all clinicians modify their language appropriately during consultations in order to deliver information in a comprehensive manner, to educate patients on their condition thus enabling informed decision making by patients.

#### Intravascular Papillary Endothelial Hyperplasia of the oral cavity - Uncommon or undiagnosed?

Author(s): Mumtaz S.; Girgis S.; Ali E.; Cheng L.; Gillan G.; Piper K.

Source: British Journal of Oral and Maxillofacial Surgery; Dec 2017; vol. 55 (no. 10)

Publication Type(s): Conference Abstract

**Abstract**:Background: Oral Intravascular Papillary Endothelial Hyperplasia (IPEH) also known as Masson's pseudoangiosarcoma or vegetant intravascular haemangioendothelioma is a benign, non-

neoplastic disorder of vascular origin caused by abnormal proliferation of endothelial cells. It commonly presents as a cutaneous lesion, however, only a few cases of oral manifestations have been reported to date. Objectives: To analyse published reports of all reported cases involving the oral cavity with the diagnosis of IPEH. Methods: Using online databases (MEDLINE, EMBASE and EBSCO) considering only 'oral' lesions reported in the English medical literature (1976 - 2016). Results: 23 publications were identified with 87 reported oral lesion cases, along with two recent case reports presenting on the tongue. The main site of oral presentation is the lower lip followed by the buccal mucosa, tongue, and upper lip. Female preponderance was noted with the fourth decade of life showing higher predilection. Excision was the most common mode of treatment with recurrence being a rare entity. Histologically, Type 1(Pure) form was considered more common (64%) compared to Type 2 - 'Mixed'(35%). Atypical specimens constituted only 1% of lesions. Conclusion: IPEH is a benign disease process and this review has highlighted its place in the current available literature. Clinicians should consider these lesions as one of the differentials in diagnosing painless, pigmented, nodular growths in the oral cavity. It is our assertion that it is no longer thought to be a rare occurrence, merely less reported.

### Floor of mouth swelling - A rare case case report:-Epidermoid cyst presenting in the floor of the mouth

Author(s): Hania M.; Mannion C.

**Source:** British Journal of Oral and Maxillofacial Surgery; Dec 2017; vol. 55 (no. 10)

Publication Type(s): Conference Abstract

Abstract: Dermoid cysts are developmental malformations caused by the inclusion of either ectoblastic, mesoblastic or endoblastic layer due to a defect in the fusion of embryonic lateral mesenchymatic layers during the 5th week of embryological development. They are typically classified into 3 types according to their histological appearance, dermoid, epidermoid and teratoid. Dermoid cysts are rare, slow-growing, benign, developmental cysts only 34% occur in the head and neck area of which 6.5% are in the floor of mouth. We present a rare case of epidermoid cyst presenting in the floor of the mouth of 17 year-old female presented to oral medicine clinic following referral by GP. A working diagnosis of a "plunging ranula" was concluded following salivary gland MDT meeting following review of clinical photos, MRI, U/Sand the patient subsequently underwent a excision of lesion with right sublingual gland via an intraoral approach under GA. However the pathology revealed the lesion consistent with an epidermoid cyst. We discuss the numerous pathological conditions can affect the floor of the mouth, and differen tial diagnoses of lesions of a development, inflammatory, obstructive, or neoplastic origin. We discuss imaging aids such as ultrasound, MRI, CT head with contrast area are that are valuable importace for estimation of tumour margins, lesion composition and assessing infiltration in surrounding tissues and Multidisciplinary teams which give platform with other departments in regards to help forming a working diagnosis and guiding surgical approach. We feel that a better understanding of epidermoid cysts, especially occurring intraorally, may add to the clinical care of patients.

#### Glomus tumour presenting in the upper lip-A case report

Author(s): Monaghan L.

Source: British Journal of Oral and Maxillofacial Surgery; Dec 2017; vol. 55 (no. 10)

**Publication Type(s):** Conference Abstract

**Abstract:**Introduction: Glomus tumours are rare, benign vascular neoplasms seen most often in the nailbeds of the hands. We report a rare case of a glomus tumour presenting as a painless lump in the upper lip. Clinical presentation: A 73 year old gentlemen was referred with a 3 month history of a soft, round, painless lump of around 1 cm in his upper labial mucosa. The patient had a history of

adenocarcinoma of the lung, managed successfully with upper lobe resection and chemotherapy. He had peripheral vascular disease and COPD. A differential diagnoses included fibroepithelial polyp, mucocele, haemangioma and salivary gland neoplasia. Histology of the excisional biopsy showed benign spindle cells and thin walled blood vessels favouring a glomus tumour. On review the biopsy site was well healed with no sign of recurrence. Unfortunately, further follow up was declined by the patient. Discussion: Glomus tumours arise from glomus bodies, which are arteriovenous anastomosis involved in thermoregulation. They are not to be confused with carotid body tumours, which historically shared the same name. Glomus tumours are classically found in the digits of the hands where greatest numbers of glomus bodies exist. They are rare in the oral cavity, with few reported cases. Age distribution is similar between tumours of the hand and oral tissues, however the strong female predilection seen in subungual tumours is not mirrored in oral lesions. Recurrence is seen in up to a third of digital tumours, although there is no available data on recurrence rates in oral tumours.

#### A rare diagnosis of a rapidly developing mandibular swelling in a 3-year old

Author(s): Pindoria J.; Orchard A.; Walker T.; Ananth S.; Hughes C.; Thomas S.

Source: British Journal of Oral and Maxillofacial Surgery; Dec 2017; vol. 55 (no. 10)

Publication Type(s): Conference Abstract

Abstract:Introduction: Desmoplastic fibroma is one of the most uncommon type of bone tumours, affecting all bones, most commonly the mandible. It is benign in nature but locally aggressive with a predisposition to recur following surgical treatment; a review of the literature suggests recurrence rates of 37% to 72%. Whilst the mean age of diagnosis has been reported as 23 years, we present a case of desmoplastic fibroma affecting the mandible of a 3-year old boy. Methods: Our patient presented to Royal Devon and Exeter Hospital Paediatrics and was later referred to OMFS at University Hospitals Bristol. He presented with a rapidly expanding, firm, painless, 5x4 cm swelling in the right submental region noted over the preceding 2 months. Peripheral motor and sensory functions were intact. Medical historywas non-contributory, with a state of good general health. Histological features of an incisional biopsy, in the context of imaging studies (MRI and CT scan), favoured a diagnosis of desmoplastic fibroma. Surgical curettage was undertaken by the maxillofacial team utilising an extra-oral and intra-oral approach. Resectionwas deemed inappropriate due to anatomical constraints. Clinical and histopathological images, including 3D CT scan reconstruction and photos provide visual aids to illustrate this case. Results: No adverse events were noted during his 3-month post-operative follow up. Clinical Relevance: Owing to significant concern of possible recurrence, this patient will require a close period of follow up. This case emphasises the importance of prompt referral, diagnosis, and surgical intervention to manage these rare tumours appropriately in the paediatric population.

#### Spindle cell sarcoma - A rare cause of a lump in the lower lip

Author(s): Monaghan L.; Ragu R.

Source: British Journal of Oral and Maxillofacial Surgery; Dec 2017; vol. 55 (no. 10)

**Publication Type(s):** Conference Abstract

**Abstract:**Introduction: Spindle cell sarcoma is a rare, malignant, mesenchymal neoplasm occurring in bone or soft tissue. As a group, soft tissue sarcomas make up less than 1% of malignant tumours. In contrast, lumps of the lower lip are very common, and overwhelmingly benign. This case shows a rare high grade spindle cell sarcoma of the lower lip, which was diagnosed clinically as a mucocele. Case report: A 48-year-old female was referred with a suspected mucous retention cyst. The lump was small, painless and reported to fluctuate in size. Clinically, a mucocele was diagnosed and a non-urgent excisional biopsy arranged. Initial and supplementary histological reports were ambiguous

and a referral to a sarcoma MDT was made. Wide local excision was undertaken, and histology confirmed a spindle sarcoma. Further histological reports were contradictory as to the grading and classification of the tumour. Following 6 weeks of radiotherapy, the patient remains free of recurrence at 2 years. Discussion: The rarity of oral spindle cell sarcomas complicates diagnosis. Unusual presentations and discrepancies in histological interpretation can lead to delays in treatment or misdiagnosis. Such discrepancies are common in histopathalogical reporting of these lesions. All sarcoma cases should be referred to sarcoma MDT and a close relationship should exist between sarcoma and head and neck MDTs. Surgery and radiotherapy are the mainstay of treatment with chemotherapy used palliatively. Head and neck sarcomas have a poorer outcome than in other anatomical sites. Guidelines for follow up exist however their evidence base is poor.

### Report from the analysis of implementiation of 4th Head and Neck Cancer Awareness Week in Department of Otolaryngology in Miedzyleski Hospital in Warsaw

**Author(s):** Dzaman K.; Piskadlo-Zborowska K.; Pietniczka-Zaleska M. **Source:** Otolaryngologia Polska; Dec 2017; vol. 71 (no. 6); p. 35-39

Publication Type(s): Article

Abstract:Introduction: The aim of the study was to analyze the profile of patients who reported for free screening examinations during the 4th European Head and Neck Cancer Awareness Week to the Department of Otolaryngology, Miedzylesie Specialist Hospital, Warsaw, Poland. Material and methods: We enrolled 225 patients, aged 26-92 years (mean, 63 years). There were 149 women (66%) and 76 men (34%). All patients filled out a survey regarding risk factors of head and neck cancer (HNC), including symptoms and lifestyle characteristics. Subsequently, all participants underwent a complete laryngological examination. Results: Among the studied patients, we found the following lifestyle-related risk factors of HNC: Tobacco use (22%), alcohol use more than 1 time per week (12%), oral sex (17%), multiple sexual partners (10%), rare dental checkups (24%), and dental prostheses (45%). The most frequent symptoms that prompted the patients to report for screening exams were as follows: chronic hoarseness (64%), xerostomia (39%), dysphagia (37%), nasal congestion (6%), and neck tumor (5%). Further imaging studies were ordered in 15 patients (7%), fiberoscopy in 25 (11%), and lesion excision in 18 (8%). Among the studied patients, 17 were referred for further oncological treatment, of whom 14 had benign tumors and 4 malignant tumors. Conclusions: The Head and Neck Cancer Awareness campaign increased the awareness of HNC, and it should systematically encompass people at increased risk. By implementing this program in our department, we were able to detect and initiate early treatment in 7.5% of the screened people. However, appropriate workup and treatment require funding and therefore systemic measures should be taken to enable a wide implementation of such screening programs.

### Effects of everolimus on tuberous sclerosis complex-associated renal angiomyolipoma: A preliminary report

Author(s): Tsai J.-D.; Sheu J.-N.; Tsai M.-L.; Wei C.-C.; Yang S.-H.; Fan H.-C.; Hsu C.-C.; Tung M.-C.

Source: Nephrology; Dec 2017; vol. 22 (no. 12); p. 1017-1022

**Publication Type(s):** Article

**Abstract:**Aim: Tuberous sclerosis complex (TSC) presents with multisystem benign neoplasm induced by dysregulation of the mammalian target of rapamycin pathway. This study aimed to examine the effects of oral everolimus at either 2.5 or 5.0 mg daily on the treatment of TSC-associated renal angiomyolipoma (AML). Methods: Between July 2012 and August 2015, patients with TSC-associated renal AML were selected for everolimus therapy protocol. An oral everolimus starting dose at 2.5 mg was administered daily, and was gradually increased to 5.0 mg daily. All patients were evaluated using magnetic resonance imaging or computed tomography scanning at baseline, 12, 24, and 36

months after the start of treatment for measuring the changes of renal AML mass volume. Results: Eight patients were finally enrolled for analysis in this study. Everolimus treatment had a statistically significant effect on the renal AML volume reduction during follow-up (P < 0.05). Renal AML mass volume reduction rates were 10.5-45.3% in four patients with everolimus 2.5 mg and 40.7-73.1% in four patients with everolimus 5.0 mg daily; the difference was statistically significant between the two groups (P < 0.05). Longitudinal follow-up for response to everolimus showed volume reduction rates to be around 10.5-73.1% in the initial 6-24 months after everolimus treatment, which remained stable during follow-up up to 36 months. Conclusion: The results suggest that an oral everolimus is effective and provides a non-invasive way to treat TSC-associated renal AML, and patients are likely to require maintenance therapy to continue to derive benefit. Copyright © 2016 Asian Pacific Society of Nephrology

#### Self-induced parapharyngeal and parotid emphysema: A case of pneumoparotitis

Author(s): Lagunas J.G.; Fuertes A.F.

Source: Oral and Maxillofacial Surgery Cases; Dec 2017; vol. 3 (no. 4); p. 81-85

Publication Type(s): Article

Abstract:Swelling of the parotid suggests pathological change. Enlargement of the parotid gland may result from infections, duct obstruction, benign or malignant tumors, allergies, autoimmune or systemic disease syndromes or lymphoproliferative diseases. Acute swelling is typically associated with viral infection or recurrent chronic parotitis. A rare cause of acute swelling is insufflation of air from the mouth via Stensen's duct into the parotid region. We report a case of recurrent self-induced chronic pneumoparotitis with parapharyngeal extension in a teenager. Pneumoparotitis is rare and is often misdiagnosed and mistreated. Patients typically present with unilateral or bilateral painless swelling and tenderness in the parotid region. Imaging, including computer tomography scans, shows air within the parotid system that extends into the neighboring areas in cases of rupture of the parotid fascia. Salivary gland enlargement resolves spontaneously over 1-3 days. Some authors recommend anti-inflammatory drugs and prophylactic antibiotics to avoid superinfection. Several surgical treatments have been suggested for chronic and recurrent pneumoparotid. However, the primary challenge is to educate the patient to prevent an increase in intraoral pressure. Copyright © 2017

### Molecular Classification of Autofluorescence Excision Margins in Oral Potentially Malignant Disorders.

Author(s): Farah, Camile S; Kordbacheh, Farzaneh; John, Keziah; Bennett, Nigel; Fox, Simon A

**Source:** Oral diseases; Dec 2017 **Publication Type(s):** Journal Article

Abstract:OBJECTIVETo define molecular differences between autofluorescence and white light defined excision margins in oral potentially malignant disorders (OPMD) using transcriptome expression profiles.MATERIALS AND METHODSExcisional biopsy specimens were taken from 11 patients at three different sites for each lesion: centre, white light margin, and autofluorescence margin. The lesions were diagnosed histopathologically as oral epithelial dysplasia, oral lichenoid dysplasia, oral lichen planus or other. Transcriptome analysis was performed by RNA sequencing, hierarchical clustering, differential expression and biological pathway analysis.RESULTSFor hierarchical clustering the samples broadly clustered according to histology rather than the margins with lichenoid samples clustering together. Differential expression analysis showed that independent of histology, there was greater molecular dysregulation between the lesion centre and autofluorescence margin compared to the lesion centre and white light margin. Furthermore, the autofluorescence and white light margins were molecularly distinct indicating the white light

margins harboured abnormality. CONCLUSIONOur results indicate that the molecular profile of OPMD changes with divergence away from the centre of the lesion, and that autofluorescence determined margins are superior to the white light margin in achieving a clear molecular margin when excising an OPMD. This article is protected by copyright. All rights reserved.

An unusual osteoma in the mandibular condyle and the successful replacement of the temporomandibular joint with a custom-made prosthesis: a case report.

Author(s): de Souza, Natalia Tavares; Cavalcante, Renan Carlos Lopes; de Albuquerque Cavalcante

Source: BMC research notes; Dec 2017; vol. 10 (no. 1); p. 727

**Publication Type(s):** Journal Article

Available at BMC research notes - from EBSCO (MEDLINE Complete)

Abstract:BACKGROUNDAn osteoma is a benign tumor of bone with unknown etiology and is considered rare, mostly restricted to the craniofacial skeleton.CASE PRESENTATIONThis case report describes an uncommon condylar osteoma in a 67 years old white female patient with laterognathism to the left side, limited mouth opening, aesthetic change and pain associated with the right temporomandibular joint (TMJ). The histopathological examination confirmed osteoma. The lesion was surgically excised and immediate reconstruction was carried out using a custommade total TMJ prosthesis. The patient has been in follow-up for 2 years, with no symptoms.CONCLUSIONSUnilateral total TMJ prosthesis can be considered to replacement of TMJ after osteoma excision with resection of the condyle.

#### Rare case report of an aggressive follicular lymphoid hyperplasia in maxilla.

Author(s): Hanemann, João Adolfo Costa; de Carli, Marina Lara; Dendena, Ernesto Rabello;

Source: Oral and maxillofacial surgery; Dec 2017; vol. 21 (no. 4); p. 475-481

Publication Type(s): Journal Article

Abstract:Follicular lymphoid hyperplasia is a very rare though benign reactive process of an unknown pathogenesis that may resemble a follicular lymphoma, clinically and histologically. Oral reactive follicular hyperplasia (RFH) has been described on the hard or soft palate and at the base of the tongue. We describe here the first case of RFH presenting as an aggressive tumor on the right posterior side of the maxilla in a 24-year-old male patient. The lesion had a clinical evolution of 18 months and was noticed after the surgical extraction of the right third molar, although we cannot assume a cause-effect relation with that surgical event whatsoever. His medical history was unremarkable. Following an incisional biopsy, histological examination revealed lymphoid follicles comprised by germinal centers surrounded by well-defined mantle zones. The germinal centers were positive for Bcl-6, CD10, CD20, CD21, CD23, CD79a, and Ki-67, while negative for Bcl-2, CD2, CD3, CD5, and CD138. The mantle and interfollicular zones were positive for Bcl-2, CD2, CD3, CD5, CD20, and CD138. Both areas were diffusively positive for kappa and lambda, showing polyclonality. The patient underwent a vigorous curettage of the lesion with no reoccurrences at 36 months of follow-up. This case report demonstrates that morphologic and immunohistochemical analyses are crucial to differentiate RFH from follicular lymphoma, leading to proper management.

#### Kimura disease of buccal region in a pediatric patient with nephrotic syndrome: A case report.

Author(s): Lee, Dong Hoon; Kim, Ga-Eon; Yang, Eunmi; Yoon, Tae Mi; Lee, Joon Kyoo; Lim, Sang Chul

Source: Medicine; Dec 2017; vol. 96 (no. 48); p. e8990

Publication Type(s): Case Reports Journal Article

Available at Medicine - from Europe PubMed Central - Open Access

**Abstract:**RATIONALEKimura disease is a rare benign, chronic inflammatory disorder that typically presents with slowly enlarging, nontender, subcutaneous swellings in the head and neck region. The occurrence of Kimura disease in the oral cavity is extremely rare.PATIENT CONCERNSA 16-year-old boy presented with a complaint of a right painless buccal mass of 3 years' duration.DIAGNOSISThe patient had been diagnosed with nephrotic syndrome and treated with corticosteroid at the age of 5 years.OUTCOMESWe report an extremely rare case of Kimura disease of the buccal region in a 16-year-old boy with nephrotic syndrome.LESSONWe controlled Kimura disease and nephrotic syndrome in this patient by using a combination of surgical resection of the buccal mass and systemic steroid therapy.

### Hyperpigmentation of the hard palate mucosa in a patient with chronic myeloid leukaemia taking imatinib.

Author(s): Bombeccari, Gian Paolo; Garagiola, Umberto; Pallotti, Francesco; Rossi, Margherita;

Source: Maxillofacial plastic and reconstructive surgery; Dec 2017; vol. 39 (no. 1); p. 37

Publication Date: Dec 2017

Publication Type(s): Journal Article

Available at Maxillofacial plastic and reconstructive surgery - from doi.org

Abstract: Background Imatinib mesylate is an inhibitor of the tyrosine kinase Bcr-Abl and a first-line treatment for Philadelphia chromosome-positive chronic myeloid leukaemia (CML). Dermatological side effects include superficial oedema, pustular eruption, lichenoid reactions, erythroderma, and skin rash. Depigmentation of the skin and/or mucosa is uncommon, and hyperpigmentation is rare. Case presentation We present the case of a 63-year-old Caucasian male with widespread hyperpigmentation of the hard palate associated with a 9-year history of imatinib therapy to treat CML. He did not complain of any symptoms. Clinical examination did not reveal any abnormal pigmentation of the skin or other region of the oral mucosa. He did not smoke cigarettes or drink alcohol. His medication regimen was a proton pump inhibitor, a beta-blocker, cardioaspirin, atorvastatin, and imatinib 400 mg/day. Histopathologically, melanin and haemosiderin deposits were evident in the lamina propria. The lesion persisted, with no clinical change, through several follow-ups. We reviewed the literature to explore the possible relationship between oral hyperpigmentation and long-term imatinib mesylate treatment. Conclusions We diagnosed oral pigmentation associated with imatinib intake based on the medical history and clinical features of the pigmented macules. Oral pigmentation may have a variety of causes, and differential diagnosis requires nodal analysis. Clinicians should be aware of possible oral mucosal hyperpigmentation in patients taking imatinib mesylate. Such pigmentation is benign and no treatment is needed, but surveillance is advisable.

### Pleomorphic Adenoma of Soft Palate: Unusual Occurrence of the Major Tumor in Minor Salivary Gland-A Case Report and Literature Review.

Author(s): Passi, Deepak; Ram, Hari; Dutta, Shubha Ranjan; Revansidha Malkunje, Laxman

Source: Journal of maxillofacial and oral surgery; Dec 2017; vol. 16 (no. 4); p. 500-505

**Publication Type(s):** Journal Article

Available at Journal of maxillofacial and oral surgery - from Europe PubMed Central - Open Access

**Abstract:**Salivary gland tumours constitute about less than 4 % of all head and neck tumours. Pleomorphic adenoma, also called benign mixed tumour, is the most common tumour of the salivary glands. About 80-90 % of these tumours occur in the major salivary glands mainly parotid gland and 10 % of them occur in the minor salivary glands. The most common site for pleomorphic adenoma of the minor salivary glands is the palate, followed by the lips and the cheeks. Other rare sites include

the floor of the mouth, tongue, tonsil, pharynx, retromolar area and the nasal cavity. Here, we are reporting a case of pleomorphic adenoma of the minor salivary glands of the soft palate in a 36-year-old Indian female. The mass was removed by wide local excision with adequate margins under general anesthesia. There was no recurrence seen after a follow-up period of 1 year.

Blue diode laser versus traditional infrared diode laser and quantic molecular resonance scalpel: clinical and histological findings after excisional biopsy of benign oral lesions.

Author(s): Gobbo, Margherita; Bussani, Rossana; Perinetti, Giuseppe; Rupel, Katia; Bevilaqua,

Lorenzo; Ottaviani, Giulia; Biasotto, Matteo

Source: Journal of biomedical optics; Dec 2017; vol. 22 (no. 12); p. 121602

Publication Date: Dec 2017

Publication Type(s): Journal Article

PubMedID: 28698889

**Abstract:**This study aims to compare the use of the innovative blue diode laser (BLUE group) with two traditional surgical techniques: the infrared diode laser (IR group) and the quantic molecular resonance scalpel (QMR group) in the excision of benign oral lesions. Ninety-three patients underwent surgical excision of a benign oral lesion and were followed up for 30 days for pain (0 to 10 visual analogue scale), bleeding, and painkillers' assumption (yes/no). A blind pathologist evaluated the thermal damage along the cutting margin. Although referred pain was lowest in the BLUE group from day 7 on (p<0.05), all patients referred minimum discomfort after surgery. The BLUE group reported minimum bleeding and necessity of sutures (p<0.000). The QMR group showed the highest bleeding during surgery (p<0.000), while after 14 and 30 days no patient bled. Most of the patients in all groups did not need painkillers. The lowest thermal damage (p<0.000) was found in the BLUE group (71.3±51.8???m), whereas the IR group proved the highest (186.8±82.7???m) compared both with the BLUE and QMR (111.4±55.4???m) groups. All the techniques allowed correct histological sampling. All the experimented techniques offer interesting advantages, although the blue laser minimizes risk of bleeding with limited thermal damage.

#### Oral leukoplakia and proliferative verrucous leukoplakia: a review for dental practitioners.

Author(s): Staines, K; Rogers, H

**Source:** British dental journal; Dec 2017; vol. 223 (no. 9); p. 655-661

**Publication Type(s):** Journal Article

Abstract:Objectives To provide an overview of the current thinking in terms of the diagnosis and management of oral leukoplakia and proliferative verrucous leukoplakia as relevant to general dental practitioners. Data sources, data selection, data extraction, data synthesis We searched the MEDLINE Ovid, EMBASE databases and the Cochrane Library, (1990 to 16 April 2017), restricting our search to English language with the following key words: leukoplakia, white patch, proliferative verrucous leukoplakia, precancerous lesion, premalignant lesions, potentially malignant oral conditions and potentially malignant oral disorders. The two authors selected key papers and engaged in collaborative data extraction and synthesis of the selected reference material. Conclusions General dental practitioners (GDPs) are likely to encounter patients with a known or yet undiagnosed oral leukoplakia in their clinical practice. The diagnosis is clinically based as there are no pathognomonic histopathological features. The definition of leukoplakia has evolved over the years. The importance of recognition and appropriate management relating to this condition is described particularly as it is one of the oral potentially malignant lesions. The inferred increased risk of malignant transformation is well documented however controversy still persists in terms of the appropriate management for these lesions. Proliferative verrucous leukoplakia is a

recalcitrant, often widespread and multifocal distinct type of leukoplakia. It is considered to have a high rate of malignant transformation with implications in terms of lifelong monitoring both clinically and histopathologically. A high index of suspicion is important for general dental practitioners in order to identify such lesions that would require onward referral for further investigation and management.

The potential role of in vivo optical coherence tomography for evaluating oral soft tissue: A systematic review.

Author(s): Gentile, Enrica; Maio, Claudio; Romano, Antonio; Laino, Luigi; Lucchese, Alberta

Source: Journal of Oral Pathology & Medicine; Nov 2017; vol. 46 (no. 10); p. 864-876

**Publication Type(s):** Academic Journal

Abstract:Background: The introduction of optical coherence tomography (OCT) in dentistry enabled the integration of already existing clinical and laboratory investigations in the study of the oral cavity. This systematic review presents an overview of the literature, to evaluate the usefulness of in vivo OCT for diagnosing oral soft tissues lesions, to compare the OCT results with traditional histology, and to identify limitations in prior studies so as to improve OCT applications. Methods: We performed a review of the literature using different search engines (PubMed, ISI Web of Science, and the Cochrane Library) employing MeSH terms such as "optical coherence tomography" and "OCT" in conjunction with other terms. We utilized the Population, Intervention, Comparison, Outcomes, and Study design (PICOS) method to define our study eligibility criteria. Results: Initial results were 3155. In conclusion, there were only 27 studies which met our selection criteria. We decided to allocate the 27 selected items into three groups: healthy mucosa; benign, premalignant, and malignant lesions; and oral manifestations of systemic therapies or pathological conditions. Conclusions: Although the OCT is an easy-to-perform test and it offers an attractive diagnostic and monitoring prospect for soft tissues of the oral cavity, further studies are needed to complete the current knowledge of this imaging technique.

#### Potentially malignant disorders-The case for intervention.

Author(s): Thomson, P. J.

Source: Journal of Oral Pathology & Medicine; Nov 2017; vol. 46 (no. 10); p. 883-887

**Publication Type(s):** Academic Journal

**Abstract:**Potentially malignant disorders (PMD) are recognisable mucosal conditions preceding invasive squamous carcinoma development. Established oral cancer remains a lethal and deforming disease, with a rising incidence. Management techniques for identifiable oral precursor lesions have traditionally been polarised between observational and interventional surgical techniques. By defining salient management goals for treating potentially malignant disease, and examining the evidence supporting the efficacy of treatment intervention, this paper presents the case for interventional laser surgery as a definitive diagnostic and treatment modality.

#### Profiling cancer risk in oral potentially malignant disorders-A patient cohort study.

Author(s): Thomson, P. J.; Goodson, M. L.; Smith, D. R.

Source: Journal of Oral Pathology & Medicine; Nov 2017; vol. 46 (no. 10); p. 888-895

**Publication Type(s):** Academic Journal

**Abstract:**Background: Oral potentially malignant disorders harbour variable and unpredictable risk for squamous carcinoma development. Whilst current management strategies utilise histopathological diagnoses, dysplasia grading and targeted intervention for "high-risk" lesions,

clinicians are unable to predict malignant potential. Methods: Detailed, retrospective clinicopathological analysis of potentially malignant lesions undergoing malignant transformation, from a 590 patient cohort treated by interventional laser surgery and followed for a mean of 7.3 years, was undertaken. Clinical outcome was documented at study census date (31 December 2014). Results: A total of 99 patients (16.8%) developed cancer: 71 (12%) seen "unexpectedly" upon excision and 28 (4.8%) progressing to malignancy at a median of 87.3 months post-surgery. Thirty "unexpected" excisions were micro-invasive (42.3%) arising primarily in severely dysplastic precursors (75%) at ventro-lateral tongue and floor of mouth sites (54.5%); 1 patient (1.4%) had a cancer-related death, whilst 58 (81.7%) were disease free. A total of 19 of 28 "progressive" cancers (67.9%) arose at new sites, with erythroleukoplakia a significant predictor of malignancy (P = .0019). Nine (32.1%) developed at the same precursor site, with 6 (77.7%) on the ventro-lateral tongue and floor of mouth. Three (10.7%) were micro-invasive, 9 patients (32.1%) died from metastatic disease and 12 (42.9%) were disease free (P < .001). Conclusion: Squamous carcinoma may arise at the site of a precursor lesion as transformation or new-site development via field cancerisation. Whilst interventional surgery facilitates early diagnosis and treatment of occult disease, thus reducing risk from same-site transformation, new-site cancer is a significant long-term risk for patients with potentially malignant disorder.

#### Efficacy of oral brush biopsy in potentially malignant disorder management.

Author(s): Goodson, M. L.; Smith, D. R.; Thomson, P. J.

Source: Journal of Oral Pathology & Medicine; Nov 2017; vol. 46 (no. 10); p. 896-901

**Publication Type(s):** Academic Journal

Abstract: Background: Oral potentially malignant disorders (PMD) harbour unpredictable risk for squamous cell carcinoma development. Current management requires tissue biopsy for histopathology characterisation, dysplasia grading and targeted intervention to "high-risk" lesions, although evidence-based guidelines are limited and diagnoses subjective. This study investigated the use of adjunctive oral brush biopsy techniques during the management of PMD in a UK hospital population. Methods: Retrospective review of a 310 PMD patient cohort presenting to Maxillofacial Surgery in Newcastle upon Tyne with new, single-site lesions between December 2009 and May 2014. Patients underwent Orcellex® brush biopsy and liquid-based cytology examination in addition to conventional biopsy techniques, with management proceeding along established care pathways. Patient demographics, cytology data, most significant histopathology diagnoses and clinical outcome were all documented at the study census date (31.12.15). Results: A total of 170 male & 140 female patients (age range 18-91 years), exhibiting primarily leukoplakia (86.5%) at floor of mouth and ventrolateral tongue sites (44.9%), were identified. Management comprised: observation (49.7%), laser surgery (44.9%), antifungal treatment (3.5%) and Head & Neck clinic referral following cancer diagnosis (1.9%). Clinical outcomes were as follows: disease free (51.3%), persistent PMD (42.3%) and malignant transformation (6.4%). Histology and cytology diagnoses strongly correlated (r = .305). Treatment modality, lesion site, histology and cytology diagnoses were the best predictors of clinical outcome. Conclusions: Orcellex® brush cytology provides reliable diagnoses consistent with conventional histopathology and offers less invasive, adjunctive assessment appropriate for longterm monitoring of patients in specialist clinics.

### Advances toward fully automated in vivo assessment of oral epithelial dysplasia by nuclear endomicroscopy-A pilot study.

Author(s): Liese, Jan; Winter, Karsten; Glass, Änne; Bertolini, Julia; Kämmerer, Peer Wolfgang

Source: Journal of Oral Pathology & Medicine; Nov 2017; vol. 46 (no. 10); p. 911-920

**Publication Type(s):** Academic Journal

Abstract: Background: Uncertainties in detection of oral epithelial dysplasia (OED) frequently result from sampling error especially in inflammatory oral lesions. Endomicroscopy allows non-invasive, "en face" imaging of upper oral epithelium, but parameters of OED are unknown. Methods: Mucosal nuclei were imaged in 34 toluidine blue-stained oral lesions with a commercial endomicroscopy. Histopathological diagnosis showed four biopsies in "dys-/neoplastic," 23 in "inflammatory," and seven in "others" disease groups. Strength of different assessment strategies of nuclear scoring, nuclear count, and automated nuclear analysis were measured by area under ROC curve (AUC) to identify histopathological "dys-/neoplastic" group. Nuclear objects from automated image analysis were visually corrected. Results: Best-performing parameters of nuclear-to-image ratios were the count of large nuclei (AUC=0.986) and 6-nearest neighborhood relation (AUC=0.896), and best parameters of nuclear polymorphism were the count of atypical nuclei (AUC=0.996) and compactness of nuclei (AUC=0.922). Excluding low-grade OED, nuclear scoring and count reached 100% sensitivity and 98% specificity for detection of dys-/neoplastic lesions. In automated analysis, combination of parameters enhanced diagnostic strength. Sensitivity of 100% and specificity of 87% were seen for distances of 6-nearest neighbors and aspect ratios even in uncorrected objects. Correction improved measures of nuclear polymorphism only. The hue of background color was stronger than nuclear density (AUC=0.779 vs 0.687) to detect dys-/neoplastic group indicating that macroscopic aspect is biased. Conclusions: Nuclear-to-image ratios are applicable for automated optical in vivo diagnostics for oral potentially malignant disorders. Nuclear endomicroscopy may promote non-invasive, early detection of dys-/neoplastic lesions by reducing sampling error.

### Immunosurveillance profile of oral squamous cell carcinoma and oral epithelial dysplasia through dendritic and T-cell analysis.

**Author(s):** Pellicioli, Ana Carolina Amorim; Bingle, Lynne; Farthing, Paula; Lopes, Márcio Ajudarte **Source:** Journal of Oral Pathology & Medicine; Nov 2017; vol. 46 (no. 10); p. 928-933

**Publication Type(s):** Academic Journal

Abstract:Oral squamous cell carcinomas (OSCCs) can arise from potentially malignant disorders, such as leukoplakia. The immune system plays an important role recognizing tumour precursor cells. However, due to immuno-editing mechanisms cancer cells are able to escape immune system surveillance. Objective: To evaluate the profile of dendritic (Langerhans and plasmacytoid) and T cells in OSCC and oral epithelial dysplasia (OED) and correlate these findings with clinical data. Materials and Methods: Fifty cases of OSCC and 48 of OED were immunostained for CD1a and CD83 dendritic Langerhans cells (DLC), CD303 plasmacytoid dendritic cells (pDC) and CD8 followed by quantitative analysis. Results: Analysis revealed a significant decrease in the number of mature CD83 DLC in OSCC compared with OED. CD303 positivity was significantly increased in the OSCC group when compared to OED. CD8-positive lymphocytes were significantly decreased in OSCC compared with OED lesions. No statistical correlation was found with clinical data. Conclusion: The number of mature dendritic cells (DC) was decreased in OSCC compared with OED lesions suggesting that either these cells might have migrated to lymph nodes to present the tumour antigens and activate the immune system or cytokines secreted by the tumour microenvironment are inhibiting the adequate maturation of DLC. The numbers of pDC were significantly increased in the OSCC group compared with the OED group. This suggests they may play an important role in the defence against tumours although it is not clear whether this is promoting or inhibiting malignant progression.

Adjuncts for the evaluation of potentially malignant disorders in the oral cavity: Diagnostic test accuracy systematic review and meta-analysis--a report of the American Dental Association.

**Author(s):** Lingen, Mark w.; Tampi, Malavika P.; Urquhart, Olivia; Abt, Elliot; Agrawal, Nishant **Source:** Journal of the American Dental Association (JADA); Nov 2017; vol. 148 (no. 11); p. 797-813

**Publication Type(s):** Academic Journal

Abstract: Background. Oral squamous cell carcinoma is the most common manifestation of malignancy in the oral cavity. Adjuncts are available for clinicians to evaluate lesions that seem potentially malignant. In this systematic review, the authors summarized the available evidence on patientimportant outcomes, diagnostic test accuracy (DTA), and patients' values and preferences (PVPs) when using adjuncts for the evaluation of clinically evident lesions in the oral cavity. Types Of Studies Reviewed. The authors searched for preexisting systematic reviews and assessed their quality using the Assessing the Methodological Quality of Systematic Reviews tool. The authors updated the selected reviews and searched MEDLINE, Embase, and the Cochrane Central Register of Controlled Trials to identify randomized controlled trials and DTA and PVPs studies. Pairs of reviewers independently conducted study selection, data extraction, and assessment of the certainty in the evidence by using the Grading of Recommendations Assessment, Development and Evaluation approach. Results. The authors identified 4 existing reviews. DTA reviews included 37 studies. The authors retrieved 7,534 records, of which 9 DTA and 10 PVPs studies were eligible. Pooled sensitivity and specificity of adjuncts ranged from 0.39 to 0.96 for the evaluation of innocuous lesions and from 0.31 to 0.95 for the evaluation of suspicious lesions. Cytologic testing used in suspicious lesions appears to have the highest accuracy among adjuncts (sensitivity, 0.92; 95% confidence interval, 0.86 to 0.98; specificity, 0.94; 95% confidence interval, 0.88 to 0.99; lowquality evidence). Conclusions and Practical Implications. Cytologic testing appears to be the most accurate adjunct among those included in this review. The main concerns are the high rate of falsepositive results and serious issues of risk of bias and indirectness of the evidence. Clinicians should remain skeptical about the potential benefit of any adjunct in clinical practice.

#### Neurilemmoma of maxillary alveolus: A rare case report and review of literature

Author(s): Kandasamy S.; John R.; Nathan R.

**Source:** Journal of Pharmacy and Bioallied Sciences; Nov 2017; vol. 9 (no. 5)

**Publication Type(s):** Article

Available at Journal of Pharmacy and Bioallied Sciences - from Europe PubMed Central - Open Access

Abstract:Schwannomas or neurilemmomas are benign, slow growing, usually solitary and encapsulated tumor, originating from Schwann cells of the nerve sheath. Intraoral schwannomas account for 1% of head and neck region and are commonly seen at the base of the tongue. Most of the literature, reports of schwannomas in the tongue region are common. In this article we report a rare occurrence of schwannoma in the maxillary alveolus region and its management. A 45 year old female patient reported to the department of oral and maxillofacial surgery with a complaint of swelling in the left maxillary alveolus in relation to molar teeth that had been present for more than 3 months. Apparently the swelling was small one initially, which gradually increased in size. Such a rare cas e of intraoral schwannoma should be followed up periodically to look for any malignant transformation and recurrences. An important conclusion that has evolved from the reviewed articles, is that the differential diagnosis of painless nodules in head and neck must include schwannomas.

### Evidence of earlier thyroid dysfunction in newly diagnosed oral lichen planus patients: A hint for endocrinologists

Author(s): Arduino P.G.; Karimi D.; Cabras M.; Gambino A.; Conrotto D.; Carbone M.; Broccoletti R

Source: Endocrine Connections; Nov 2017; vol. 6 (no. 8); p. 726-730

Publication Type(s): Article

Available at Endocrine Connections - from Europe PubMed Central - Open Access

Abstract: The association between oral lichen planus (OLP) and hypothyroidism has been debated with conflicting results: some authors detected a statistically significant association between these two, while others did not confirm it. The aim of this study was to evaluate the thyroid status in patients with newly diagnosed OLP to test the null hypothesis that thyroid disease is not associated with an increased incidence of oral lesions, with a prospective case-control approach. A total of 549 patients have been evaluated, of whom 355 were female. Odds ratio (OR) and 95% confidence intervals (CIs) were obtained. Patients suffering from thyroid diseases were associated with an almost 3-fold increased odds of having OLP (OR 2.85, 95% CI: 1.65-4.94), after adjusting this analysis for age, gender, body mass index, smoking status, diabetes, hypertension and hepatitis C infection. It would be appropriate to further investigate the possible concomitance of OLP among patients with thyroid disorder; endocrinologists should be aware of this association, especially because OLP is considered a potentially malignant oral disorder. Copyright © 2017 The authors Published by Bioscientifica Ltd.

#### A report on the clinical-pathological correlations of 788 gingival lesion

Author(s): Gambino A.; Carbone M.; Broccoletti R.; Carcieri P.; Conrotto D.; Arduino P.G.

Source: Medicina Oral, Patologia Oral y Cirugia Bucal; Nov 2017; vol. 22 (no. 6)

Publication Type(s): Article

Available at Medicina Oral, Patologia Oral y Cirugia Bucal - from Europe PubMed Central - Open Access

Abstract: Background: The diagnosis and treatment of a variety of non-plaque related gingival diseases have become an integrated aspect of everyday dentistry. The aim of this study was to analyse the relationship between clinical appearance and histopathological features of gingival lesions in a large Northern Italian population. Material and Methods: A retrospective study of 788 cases of gingival and alveolar mucosal biopsies was set up. Statistical analysis was performed by calculating the odds ratio and 95% confidence interval (C.I.), in order to assess the degree of association between the clinical parameters considered (primary lesions) and the single pathologies, statistically evaluated by Mantel-Haenszel tests. The correlation between clinical and histological diagnosis was classified as follow: 1) expected data (ED): provisional clinical diagnosis; 2) real data (RD): final histopathology diagnosis; 3) concordant data (CD): correspondence between the expected data and real data. The correlation was calculated as follow: CC (complete concordance) = CD x 100/ED, this expressing the percentage in which the clinical and the histological diagnosis overlapped. Results: The most frequently observed and biopsied primary lesions resulted to be exophytic, followed by mucosal colour changes and finally by losses of substance. The statistically significant association between primary lesion and their manifestation in gingival pathologies was reported. Volume increases, for instance, were positively correlated to plasma cell epulis, pyogenic granuloma, fibrous reactive hyperplasia and hemangioma. Verrucous-papillary lesions were most often seen in verrucous carcinoma, verrucous leukoplakia and mild dysplasia. White lesion resulted to be related to leukoplakia or oral lichen planus. Red lesions resulted to be related only oral lichen planus. Erosive vesicle-bullous lesions were linked to disimmune pathologies. Ulcerative lesions were positively associated to oral squamous cell cancer. Finally, potentially malignant disorders have the most percentage high concordance. Among the malignant lesions, the correlation increased up to the squamous cell carcinoma and leukaemia. Conclusions: This article presented the frequency and the clinico-pathological concordance of all primary lesions and the histopathological diagnosis of gingival lesions. For every primary lesion, it is possible to correlate a specific histopathological diagnosis in a statistical manner. This can be a valuable aid for not specialist clinicians who daily observe mucosae and have the opportunity to intercept major diseases. Copyright © Medicina Oral S. L. C.I.F.

Oral verruciform xanthoma and erythroplakia associated with chronic graft-versus-host disease: a rare case report and review of the literature.

Author(s): Capocasale, Giorgia; Panzarella, Vera; Tozzo, Pietro; Mauceri, Rodolfo; Rodolico, Vito

Source: BMC research notes; Nov 2017; vol. 10 (no. 1); p. 631

**Publication Type(s):** Journal Article

Available at BMC research notes - from EBSCO (MEDLINE Complete)

Abstract:BACKGROUNDOral verruciform xanthoma is an uncommon benign lesion. Although oral verruciform xanthoma occurs in healthy individuals, it has been also reported in association with some inflammatory conditions. The aim of this study is to report a case of oral verruciform xanthoma associated with chronic graft-versus-host disease and to review the literature on this topic.CASE PRESENTATIONA 47-year-old Caucasian male presented to the Sector of Oral Medicine "V. Margiotta", University Policlinic "P. Giaccone" of Palermo complaining of a mass on the gingiva. He first noticed the painless mass 1 year ago. He reported to have undergone allogenic hematopoietic stem cell transplantation 15 years ago for acute lymphoblastic leukaemia. Intraoral examination revealed a well-circumscribed, sessile yellowish and verrucous nodule upon canine, multiple yellowish and verrucous nodules on the hard palate, yellowish and verrucous nodules on left buccal mucosa. In addiction an area of white striae in a reticular pattern with erythema and ulceration was present on the dorsum of the tongue. This lesion was consistent with a known history of oral chronic graft versus host disease. Moreover, we observed a suspected area of oral erythroplakia yet on the dorsum of the tongue. In biopsy specimen of hard palate histopathological examination revealed a diagnosis of verrucous xanthoma of the oral cavity; in addiction in biopsy specimen of the dorsum of the tongue revealed the presence of erythroplakia with high grade dysplasia.CONCLUSIONVerruciform xanthoma of the oral cavity associated with chronic graft-versushost disease is a rare condition with a usually benign clinical course but malignant transformation has been described in association with oral potential malignant disorder (e.g. chronic graft versus host disease, erythroplakia). Very rare cases showed association with oral chronic graft versus-hostdisease. To date, only eight cases were published in the world literature. Therefore it could be important follow up patients also for oral verruciform xanthoma onset.

#### White oral mucosal lesions among the Yemeni population and their relation to local oral habits.

Author(s): Al-Maweri, Sadeq A; Al-Jamaei, Aisha; Saini, Rajan; Laronde, Denise M; Sharhan, Amany

Source: Journal of investigative and clinical dentistry; Nov 2017

**Publication Type(s):** Journal Article

**Abstract:**AIMSThe aim of the present study was to assess the prevalence and risk factors of white oral mucosal lesions among Yemeni adults; in particular, those who chew khat and tobacco.METHODSThe present cross-sectional study included 1052 dental patients aged 15 years and older. A detailed oral examination was performed by a single examiner in accordance with standard international criteria.RESULTSOverall, 25.2% of the study participants presented with one or more white lesions. The most prevalent lesions were khat-induced white lesion (8.8%), leukoedema (5.1%), and frictional keratosis (3.9%). Potentially malignant lesions, such as lichen planus, leukoplakia, and smokeless tobacco-induced lesions, were seen in 2.4%, 1.2%, and 1.7% of participants, respectively. Moreover, three cases of oral cancer were identified. The presence of white lesions was found to be significantly associated with advanced age (P = .004), male gender (P = .009), and khat/tobacco chewing habits (P < .001).CONCLUSIONSThe present study demonstrates a high prevalence of oral benign and potentially malignant white lesions. Further, it highlights the urgent need to develop and implement new government policies to regulate the sale of these products to reduce the prevalence of these lesions and the overall incidence of oral cancers in the Yemeni population.

Rare presentation of cementoblastoma associated with the deciduous maxillary second molar.

Author(s): Nagvekar, Shruti; Syed, Shaheen; Spadigam, Anita; Dhupar, Anita

Source: BMJ case reports; Nov 2017; vol. 2017

Publication Type(s): Journal Article

**Abstract:**Cementoblastoma is a benign odontogenic neoplasm accounting for less than 0.69%-8% of all odontogenic tumours and is characterised by the presence of sheets of cementum-like tissue demonstrating large number of reversal lines. It shows an unlimited growth potential and a recurrence rate as high as 37.1%. It most commonly affects the permanent mandibular molars. This paper presents the third reported case of cementoblastoma affecting the deciduous maxillary posterior dentition. A 12-year-old male patient reported to the Department of Oral and Maxillofacial Pathology with a chief complaint of pain and swelling in relation to the deciduous maxillary left second molar.

#### Lipoma on the Lower Lip.

Author(s): Aita, Tiago Gai; Bonardi, João Paulo; Stabile, Gaykon Alex Vitti;

Source: The Journal of craniofacial surgery; Nov 2017; vol. 28 (no. 8); p. e750

Publication Type(s): Journal Article

**Abstract:**Lipoma is a benign tumor of fat tissue, found frequently in subcutaneous tissues. However, oral manifestations are relatively rare. The present patient illustrates the successful treatment of a lipoma treated by complete excision of the lesion. A female patient, 75 years old, presenting lesion in the right oral vestibule where excisional biopsy was performed. The professional must diagnose this type of injury as soon as possible and treat it so that it does not take large proportions, which can result in esthetic and functional sequelae to the patient.

#### Controversies in Oral and Maxillofacial Pathology.

Author(s): Peacock, Zachary S

Source: Oral and maxillofacial surgery clinics of North America; Nov 2017; vol. 29 (no. 4); p. 475-486

Publication Type(s): Journal Article Review

Abstract:Several benign pathologic entities that are commonly encountered by the oral and maxillofacial surgeon remain controversial. From etiology to treatment, no consensus exists in the literature regarding the best treatment of benign lesions, such as the keratocystic odontogenic tumor, giant cell lesion, or ameloblastoma. Given the need for often-morbid treatment to prevent recurrence of these lesions, multiple less-invasive treatments exist in the literature for each entity with little agreement. As the molecular and genomic pathogenesis of these lesions are better understood, directed treatments will hopefully lessen the contention in management.

#### Benign tumors and tumor-like lesions of the oral cavity and jaws: An analysis of 709 cases.

Author(s): Kilinc, A; Saruhan, N; Gundogdu, B; Yalcin, E; Ertas, U; Urvasizoglu, G

Source: Nigerian journal of clinical practice; Nov 2017; vol. 20 (no. 11); p. 1448-1454

Publication Type(s): Journal Article

Available at Nigerian journal of clinical practice - from EBSCO (MEDLINE Complete)

**Abstract**:PURPOSEThe purpose was to examine the prevalence, gender, age and site(s) of odontogenic and nonodontogenic benign tumors, and tumor-like lesions occurring in the oral cavity

and jaws in a Turkish population, particularly, in the Eastern Turkey, and to compare findings of this study with other reports.MATERIALS AND METHODSThe data were collected from the files of the Department of Oral and Maxillofacial Surgery and the Department of Oral Pathology, Ataturk University, Turkey, during a 10-year period from January 2005 to January 2015. They were analyzed descriptively regarding prevalence, age, sex, lesion type, and site.RESULTSA total of 709 benign tumor and tumor-like lesions of the oral cavity, and jaws were selected during a period of 10 years. One hundred and twenty-one of these lesions (17%) were odontogenic benign tumors while 588 (83%) were nonodontogenic benign tumor and tumor-like lesions.CONCLUSIONSThis study revealed that the distribution and characteristics of benign tumors and tumor-like lesions of oral cavity and jaws in the Turkish population, particularly including the Eastern region of Turkey have some differences as well as similarities with the findings of studies in different populations.

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January 2018, Volume 125, Issue 1

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November 2017, Volume 23, Issue 8

#### **Journal of Oral Pathology & Medicine**

November 2017, Volume 46, Issue 10

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