

# Oral Medicine

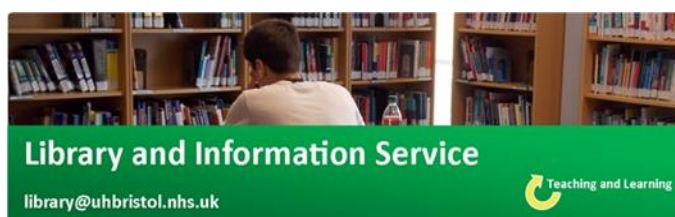
## Evidence Update



**April 2018**

**Quarterly**

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## Lunchtime Drop-in Sessions

### April (12.00-13.00)

5th (Thu) **Literature Searching**

9th (Mon) **Critical Appraisal**

17th (Tue) **Statistics**

25th (Wed) **Literature Searching**

### May (13.00-14.00)

3rd (Thu) **Critical Appraisal**

11th (Fri) **Statistics**

14th (Mon) **Literature Searching**

22nd (Tue) **Critical Appraisal**

30th (Wed) **Statistics**

### June (12.00-13.00)

7th (Thu) **Literature Searching**

11th (Mon) **Critical Appraisal**

20th (Wed) **Statistics**

28th (Thu) **Literature Searching**

## 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 [library@uhbristol.nhs.uk](mailto:library@uhbristol.nhs.uk)

**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](mailto: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](mailto:library@uhbristol.nhs.uk)

# Contents

Latest Evidence .....	4
 National Institute for Health and Care Excellence .....	4
 Cochrane Library .....	4
 UpToDate® .....	4
 The British Society for Oral Medicine <small>CLINICAL CARE • RESEARCH • EDUCATION</small> .....	5
Recent Database Articles on Oral Medicine .....	5
Trigeminal neuralgia, Oro-facial pain and Burning mouth syndrome .....	5
Oral ulceration .....	22
Potentially malignant lesions .....	26
Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology.....	38
Oral Diseases Journal .....	38
Journal of Oral Pathology & Medicine .....	38
Departmental News .....	37
Library Opening Times .....	40

## Latest Evidence

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

[Thyroid Cancer Screening \(PDQ®\)–Health Professional Version National Cancer Institute at the National Institutes of Health](#)

Source: [National Cancer Institute, USA](#) - 07 March 2018

[The psychosocial impact of orofacial pain in trigeminal neuralgia patients: a systematic review](#)

Source: [PubMed](#) - 08 March 2018 - Publisher: International Journal Of Oral And Maxillofacial Surgery  
[Read Summary](#)



[Treatment of dental and orthodontic complications in thalassaemia](#)

Online Publication Date: February 2018

**UpToDate**<sup>®</sup>

*OpenAthens login required. Register here: <https://openathens.nice.org.uk/>*

[Treatment of Behçet syndrome](#)

**Literature review current through:** Apr 2018. | **This topic last updated:** Feb 12, 2018.

[Clinical manifestations and diagnosis of Behçet syndrome](#)

**Literature review current through:** Apr 2018. | **This topic last updated:** Feb 13, 2018.

[Overview of craniofacial pain](#)

**Literature review current through:** Apr 2018. | **This topic last updated:** Apr 27, 2018.

[Trigeminal neuralgia](#)

**Literature review current through:** Apr 2018. | **This topic last updated:** Apr 11, 2018.

[Treatment of stage I and II \(early\) head and neck cancer: The oral cavity](#)

**Literature review current through:** Apr 2018. | **This topic last updated:** Feb 20, 2018

**Patient Information** Please refer to the [disclaimer](#)

### Access to Oral Medicine Care

Information about seeing an Oral Medicine specialist in the UK and Ireland is given in the [Clinical Care section "Oral Medicine Specialists"](#) which includes the locations of the specialist clinics and the staff at each.

### Information about Oral Medicine conditions

Patients may find the following sources of information prepared by BSOM useful:

- [Patient Information Leaflets](#) (*pdf documents to print*)
- [Patient Support Groups & Other Sources of Information](#)
- [Examples of Clinical Cases seen in Oral Medicine](#)

The European Association of Oral Medicine also provides Patient Information:

- [EAOM Handbook](#)

## 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: [library@uhbristol.nhs.uk](mailto:library@uhbristol.nhs.uk)

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

**Quest for haller cells: A digital orthopantomography study.**

**Author(s):** Nedunchezian, Kavita; Aswath, Nalini; Amudhan, A

**Source:** Indian journal of dental research : official publication of Indian Society for Dental Research; 2018; vol. 29 (no. 2); p. 181-185

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

Available at [Indian Journal of Dental Research](#) - from [ijdr.in](http://ijdr.in)

**Abstract:** Aims Haller Cells refer to the ethmoidal pneumatization and are the extensions of anterior ethmoid sinus into the floor of the orbit and superior aspect of the maxillary sinus, basically an anatomic variation. They may be associated with orofacial pain, sinusitis, nasal obstruction, impaired nasal breathing, headache, chronic cough, and mucocele. The aim of the present study was to identify, determine the prevalence and characteristics of Haller's cells on Digital orthopantomographs in patient's reporting to a dental institution in Chennai. Settings and Design: This was a retrospective, cross-sectional study. Subjects and Methods The study group comprised 600 radiographs inclusive of both genders (379 females and 221 males) with an age range of 20-80 years. Retrospectively panoramic radiograph for each of the patients was viewed and interpreted for the presence of Haller's cells. The data collected was subjected to statistical analysis: frequencies/percentages, descriptive statistics to obtain the results. Statistical Analysis Used Frequencies/percentages, descriptive statistics using SPSS for Windows Version 20 (SPSS Inc., Chicago, IL, USA), to obtain the results. Results Haller's cells were noted in patients, accounting for a prevalence of 23.61%. The majority of the cells were circular, ovoid, and irregular in shape. Conclusions This study has attempted to explore the characteristics of Haller's cells on panoramic radiographs. A description of Haller's cells on these radiographs may prove vital in enumerating the differential diagnosis for patients afflicted with intractable orofacial pain and reduce the risk of untoward intraoperative complications during endonasal procedures.

#### **Understanding of Burning Mouth Syndrome Based on Psychological Aspects.**

**Author(s):** Kim, Moon-Jong; Kho, Hong-Seop

**Source:** The Chinese journal of dental research : the official journal of the Scientific Section of the Chinese Stomatological Association (CSA); 2018; vol. 21 (no. 1); p. 9-19

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

**Abstract:** Burning mouth syndrome (BMS) is a chronic pain condition characterised by a persistent burning sensation in clinically normal oral mucosa. BMS most commonly occurs in middle-aged and elderly women. Various local and systemic factors can cause oral burning symptoms. When all possible local and systemic factors are excluded, burning mouth symptoms can be diagnosed as BMS. Psychophysical tests and histopathological data suggest the involvement of peripheral and central neuropathic mechanisms in BMS etiopathogenesis. Psychological problems are frequently observed in BMS patients. Several mechanisms, including increased parafunctional habits, steroid dysregulation, central disinhibition due to taste dysfunction, and low dopamine levels in the brain, have been proposed as an explanation for the role of psychological factors in BMS pathophysiology. However, the causal relationship between BMS and psychological problems remains controversial. Given the neuropathic nature of BMS, treatment for it is similar to other neuropathic pain conditions. Although various treatment modalities, including pharmacological intervention, behavioural therapy and psychotherapy, have been proposed, there is no definitive treatment always effective for the majority of BMS patients. In conclusion, for better understanding of the relationship between BMS and psychological factors, well-designed prospective studies are needed. In addition, the evaluation and treatment of psychological problems are essential for successful management of BMS patients.

#### **Prevalence of diagnosed temporomandibular disorders: A cross-sectional study in Brazilian adolescents.**

**Author(s):** Bertoli, Fernanda Mara de Paiva; Bruzamolin, Carolina Dea; Pizzatto, Eduardo; Losso, Estela Maris; Brancher, João Armando; de Souza, Juliana Feltrin

**Source:** PloS one; 2018; vol. 13 (no. 2); p. e0192254

**Publication Date:** 2018

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

**PubMedID:** 29420573

Available at [PLOS ONE](#) - from EBSCO (MEDLINE Complete)

**Abstract:**BACKGROUND The prevalence of signs and symptoms of temporomandibular disorders (TMD) increases during adolescence and adulthood. Few studies have examined TMD prevalence in Brazilian adolescents. AIM To investigate the prevalence of TMD in Brazilian adolescents. METHODS A representative population-based sample of 934 adolescents (10-14-years-old) was examined. TMD screening was performed using a questionnaire by the American Academy of Orofacial Pain. TMD diagnoses used research diagnostic criteria for temporomandibular disorders (RDC/TMD-Axis-I). Examinations were performed by a single calibrated examiner ( $\kappa > 0.80$ ). RESULTS The prevalence of TMD symptoms was 34.9%; the most frequently reported symptoms were headache and neck ache (20.9%), followed by joint sounds (18.5%). Myofascial pain was the most prevalent type (10.3%), followed by disc displacement with reduction (8.0%) and arthralgia (3.5%). There was a significant association between sex and TMD symptoms; prevalence was significantly higher in girls (RP = 1.37; 95% CI = 1.14-1.65;  $p = 0.001$ ). Myofascial pain of TMD and displacement with reduction were more prevalent in girls (RP = 1.76;  $p = 0.007$  and RP = 2.06;  $p = 0.004$ , respectively). CONCLUSION TMD symptoms were present in 34.9% of adolescents, with myofascial pain being the most prevalent type (10.3%). TMD was significantly more common in girls. Routine pediatric dental care should include a TMD screening.

#### **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; 2018; vol. 32 (no. 1); p. 91

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

**Abstract:**AIM To investigate the prevalence and predictive factors of Sjögren's syndrome (SS) in a cohort of patients with burning mouth symptoms. METHODS A 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. RESULTS A 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. CONCLUSION The 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.

#### **Depression and distress in burning mouth syndrome: A case control study.**

**Author(s):** Di Stasio, D; Candotto, V; Serpico, R; Migliozi, R; Petrucci, M; Tammaro, M; Maio, C

**Source:** Journal of biological regulators and homeostatic agents; 2018; vol. 32 (no. 2)

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

Available at [Journal of biological regulators and homeostatic agents](#) - from EBSCO (MEDLINE Complete)

**Abstract:**To compare the results of psychometric tests in patients with BMS and controls, participants were tested for depression, anxiety, fatigue and distress. Patients with BMS had noticeably higher scores for depression, fatigue and distress, compared to controls. Depression and distress were significantly correlated with the burning symptom. Moreover, distress and burning symptoms proved to be interdependent. Depression seems to play a specific role in BMS. Burning symptoms affect quality of life of patients and they could be a predictor of distress.

**A potential side effect of oral topical steroids: Central serous chorioretinopathy.**

**Author(s):** George, Saranya; Balan, Anita

**Source:** Indian journal of dental research : official publication of Indian Society for Dental Research; 2018; vol. 29 (no. 1); p. 107-108

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

Available at [Indian Journal of Dental Research](http://Indian Journal of Dental Research) - from ijdr.in

**Abstract:**Topical corticosteroids are some of the most common drugs used in oral medicine for treating atrophic and erosive lesions that affect the mucosa. Adverse effects of these drugs include oral candidiasis with associated burning mouth and hypogeusia, hypersensitive reactions to the drug, and inhibition of the hypothalamic-pituitary-adrenal axis and secondary adrenal insufficiency. The ocular side effects of oral topical steroids are less documented. This short communication describes a case of central serous retinopathy that developed following administration of oral topical steroid.

**Perfusion and brain tissue changes in the burning mouth syndrome: A diagnostic value of arterial spin labeling and volumetric MRI**

**Author(s):** Choi W.S.; Ryu C.-W.; Lee Y.

**Source:** Neuroradiology; 2018; vol. 60 (no. 1); p. 346

**Publication Date:** 2018

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

Available at [Neuroradiology](http://Neuroradiology) - from EBSCO (MEDLINE Complete)

**Abstract:****PURPOSE:** The mouth burning syndrome (BMS) is the chronic pain disorder characterized by a burning sensation in the oral cavity with an absence of any relevant clinical and laboratory findings. Few studies were evaluated in brain alterations in the BMS subjects. In order to assess the diagnostic value of brain imaging for discriminating BMS, we evaluated the change of brain tissue and perfusion in MBS acquired with a structural MR image and arterial spin labeling (ASL) perfusion MR image, respectively. **MATERIAL AND METHODS:** This prospective cross-sectional study involved 12 patients with BMS and 18 healthy controls. A volumetric T1-weighted magnetization-prepared rapid gradient-echo (MP-RAGE) and pseudo-continuous ASL (pCASL) were underwent to obtain gray and white matter volumes and cerebral blood flow (CBF), respectively. To compare the difference of the brain tissue volume and CBF between the two groups, unpaired t-test was performed. Receiver operating curve analysis was performed to evaluate whether the brain tissue and CBF changes can differentiate the subject groups. **RESULTS:** Compared with the control group, the gray matter volume (GMV) in the BMS group was smaller in the bilateral thalami (FWE corrected  $p < 0.05$ ). In contrast to GMV, the BMS subjects had significantly larger white matter volume (WMV) than the control in the left cerebellum (unpaired  $p < 0.001$ ). The regional CBF was significantly increased in the BMS group in the right primary auditory cortex, right inferior temporal gyrus and right insula (unpaired  $p < 0.001$ ) compared with the controls. The area under curve values of GMV, WMV, and CBF to discriminate the MBS from controls was 0.991, 0.940, 0.903, respectively. **CONCLUSIONS:** In BMS patients, decrease of GMV in the bilateral thalami is consistent with the common area related with the chronic pain, implying that BMS is accompanied by brain atrophy, involving the



thalamocortical processing. In addition, the alteration of CBF in attention/mood related regions suggests the relationship between cerebral perfusion and psychologic symptoms in MBS. Voxel-wise analysis of brain MRI can be used as a biomarker to discriminate BMS.

**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; May 2018; vol. 24 (no. 4); p. 638-649

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

**Abstract:**OBJECTIVE To 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. METHODS In this case-control study, 200 patients with BMS vs 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. RESULTS Poor sleep quality (PSQI  $\geq$  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 ( $p < .001$ ). A depressed mood and anxiety correlated positively with sleep disturbance. The Pearson correlations were 0.570 for the PSQI vs HAM-D ( $p < .001$ ) and 0.549 for the PSQI vs HAM-A ( $p < .001$ ). Pain intensity (NRS) poorly correlated to sleep quality; the Pearson correlation was 0.162 for the PSQI vs NRS ( $p = .021$ ). CONCLUSION The BMS patients showed a poor sleep quality, anxiety and depression, as compared with the controls, highlighting the relationships between oral burning, sleep and mood.

**Salivary scintigraphy for Sjögren's syndrome in patients with xerostomia: A retrospective study.**

**Author(s):** Nadal, M; Levy, M; Bakhsh, A; Joly, A; Maruani, A; Vaillant, L; Erra, B; Samimi, M

**Source:** Oral diseases; May 2018; vol. 24 (no. 4); p. 552-560

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

**Abstract:**OBJECTIVE The value of salivary gland scintigraphy in the diagnosis of Sjögren's syndrome remains controversial. The primary aim of this study was to estimate the diagnostic accuracy of salivary gland scintigraphy in the diagnosis of Sjögren's syndrome among 237 patients with xerostomia. METHODS We retrospectively compared eight scintigraphy parameters between 106 Sjögren patients and 131 non-Sjögren patients. RESULTS Seven of the eight parameters were significantly decreased in patients with Sjögren; however, their diagnostic accuracy was low, with areas under the curves (AUCs) ranging from 0.58 (95% CI 0.50-0.65) to 0.63 (95% CI: 0.55-0.70). The prestimulatory oral activity index allowed discrimination between primary and secondary Sjögren's syndrome (AUC 0.73, 95% CI: 0.62-0.84), and the secretion velocity for parotid glands allowed discrimination between patients with Sjögren and burning mouth syndrome (AUC 0.71, 95% CI 0.59-0.82). CONCLUSION The accuracy of scintigraphy parameters for the diagnosis of Sjögren's syndrome among patients with xerostomia was low; however, some functional indices appeared to assist discrimination between primary and secondary SS patients and between subgroups of patients with different causes of xerostomia.

**VGLUT1 or VGLUT2 mRNA-positive neurons in spinal trigeminal nucleus provide collateral projections to both the thalamus and the parabrachial nucleus in rats.**

**Author(s):** Zhang, Chun-Kui; Li, Zhi-Hong; Qiao, Yu; Zhang, Ting; Lu, Ya-Cheng; Chen, Tao;

**Source:** Molecular brain; Apr 2018; vol. 11 (no. 1); p. 22

**Publication Date:** Apr 2018

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

Available at [Molecular Brain](#) - from EBSCO (MEDLINE Complete)

**Abstract:**The trigemino-thalamic (T-T) and trigemino-parabrachial (T-P) pathways are strongly implicated in the sensory-discriminative and affective/emotional aspects of orofacial pain, respectively. These T-T and T-P projection fibers originate from the spinal trigeminal nucleus (Vsp). We previously determined that many vesicular glutamate transporter (VGLUT1 and/or VGLUT2) mRNA-positive neurons were distributed in the Vsp of the adult rat, and most of these neurons sent their axons to the thalamus or cerebellum. However, whether VGLUT1 or VGLUT2 mRNA-positive projection neurons exist that send their axons to both the thalamus and the parabrachial nucleus (PBN) has not been reported. Thus, in the present study, dual retrograde tract tracing was used in combination with fluorescence in situ hybridization (FISH) for VGLUT1 or VGLUT2 mRNA to identify the existence of VGLUT1 or VGLUT2 mRNA neurons that send collateral projections to both the thalamus and the PBN. Neurons in the Vsp that send collateral projections to both the thalamus and the PBN were mainly VGLUT2 mRNA-positive, with a proportion of 90.3%, 93.0% and 85.4% in the oral (Vo), interpolar (Vi) and caudal (Vc) subnucleus of the Vsp, respectively. Moreover, approximately 34.0% of the collateral projection neurons in the Vc showed Fos immunopositivity after injection of formalin into the lip, and parts of calcitonin gene-related peptide (CGRP)-immunopositive axonal varicosities were in direct contact with the Vc collateral projection neurons. These results indicate that most collateral projection neurons in the Vsp, particularly in the Vc, which express mainly VGLUT2, may relay orofacial nociceptive information directly to the thalamus and PBN via axon collaterals.

### **Benefits of implementing pain-related disability and psychological assessment in dental practice for patients with temporomandibular pain and other oral health conditions.**

**Author(s):** Visscher, Corine M; Baad-Hansen, Lene; Durham, Justin; Goulet, Jean-Paul;

**Source:** Journal of the American Dental Association (1939); Apr 2018

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

**Abstract:**BACKGROUND Evidence in the field of dentistry has demonstrated the importance of pain-related disability and psychological assessment in the development of chronic symptoms. The Diagnostic Criteria for Temporomandibular Disorders offer a brief assessment for the diagnostic process in patients with orofacial pain (Axis II). The authors describe relevant outcomes that may guide general oral health care practitioners toward tailored treatment decisions and improved treatment outcomes and provide recommendations for the primary care setting. METHODS The authors conducted a review of the literature to provide an overview of knowledge about Axis II assessment relevant for the general oral health care practitioner. RESULTS The authors propose 3 domains of the Axis II assessment to be used in general oral health care: pain location (pain drawing), pain intensity and related disability (Graded Chronic Pain Scale [GCPS]), and psychological distress (Patient Health Questionnaire-4 [PHQ-4]). In the case of localized pain, low GCPS scores (0-II), and low PHQ-4 scores (0-5), patients preferably receive treatment in primary care. In the case of widespread pain, high GCPS scores (III-IV), and high PHQ-4 scores (6-12), the authors recommend referral to a multidisciplinary team, especially for patients with temporomandibular disorder (TMD) pain. CONCLUSION The authors recommend psychological assessment at first intake of a new adult patient or for patients with persistent TMD pain. The authors recommend the pain-related disability screening tools for all TMD pain symptoms and for dental pain symptoms that persist beyond the normal healing period. PRACTICAL IMPLICATIONS A brief psychological and pain-related disability

assessment for patients in primary care may help the general oral health care practitioner make tailored treatment decisions.

**A case-control evaluation of fungiform papillae density in burning mouth syndrome.**

**Author(s):** Naud, Jason M; Benca, Laura; Drangsholt, Mark T; LeResche, Linda; Coldwell, Susan E

**Source:** The Laryngoscope; Apr 2018; vol. 128 (no. 4); p. 841-846

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

**Abstract:** HYPOTHESIS It has been hypothesized that high fungiform papillae density may be a risk factor for developing the taste and pain alterations characteristic of burning mouth syndrome. OBJECTIVE Evaluate whether fungiform papillae density, taste sensitivity, and mechanical pain sensitivity differ between burning mouth syndrome cases and controls. STUDY DESIGN This case-control study compared cases diagnosed with primary burning mouth syndrome with pain-free controls. METHODS Participants (17 female cases and 23 female controls) rated the intensity of sucrose, sodium chloride, citric acid, and quinine applied separately to each side of the anterior tongue and sampled whole mouth. Mechanical pain sensitivity was assessed separately for each side of the tongue using weighted pins. Digital photographs of participants' tongues were used to count fungiform papillae. RESULTS Burning mouth syndrome cases had increased whole mouth taste intensity. Cases also had increased sensitivity to quinine on the anterior tongue, as well as increased mechanical pain sensitivity on the anterior tongue. Fungiform papillae density did not differ significantly between cases and controls. Fungiform papillae density on the left and right sides of the tongue were correlated in controls; however, there was no left/right side correlation in cases. CONCLUSION Cases had increased pain and taste perception on the anterior tongue. The lack of correlation between left and right fungiform papillae density in cases may be an indication of asymmetrical lingual innervation in these patients. LEVEL OF EVIDENCE 3b. Laryngoscope, 128:841-846, 2018.

**Not only limbs in atypical restless legs syndrome.**

**Author(s):** Turrini, Alessandra; Raggi, Alberto; Calandra-Buonaura, Giovanna; Martinelli, Paolo;

**Source:** Sleep medicine reviews; Apr 2018; vol. 38 ; p. 50-55

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

**Abstract:** Restless legs syndrome (RLS) typically affects the limbs, but the involvement of other body parts has also been reported. In this essay, we critically review all literature reports of atypical RLS cases with unusual localizations. Applying the updated diagnostic criteria of the International restless legs syndrome study group (IRLSSG), which also consider symptoms localized outside of the lower limbs, a few of these atypical cases reported in the previous literature resulted in a definitive diagnosis of RLS. We also discuss the relationship between RLS and burning mouth syndrome (BMS) or restless genital syndrome (RGS). We conclude clinical sleep specialists should be aware of unusual RLS localizations because they respond to the usual treatment for RLS. All the IRLSSG diagnostic criteria should be applied in every suspected case, in order to establish a correct diagnosis of this disabling but treatable condition.

**Burning mouth syndrome: a systematic review of treatments.**

**Author(s):** Liu, Y F; Kim, Y; Yoo, T; Han, P; Inman, J C

**Source:** Oral diseases; Apr 2018; vol. 24 (no. 3); p. 325-334

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

**Abstract:**Burning mouth syndrome (BMS) is a chronic oral pain syndrome that primarily affects peri- and postmenopausal women. It is characterized by oral mucosal burning and may be associated with dysgeusia, paresthesia, dysesthesia, and xerostomia. The etiology of the disease process is unknown, but is thought to be neuropathic in origin. The goal of this systematic review was to assess the efficacy of the various treatments for BMS. Literature searches were conducted through PubMed, Web of Science, and Cochrane Library databases, which identified 22 randomized controlled trials. Eight studies examined alpha-lipoic acid (ALA), three clonazepam, three psychotherapy, and two capsaicin, which all showed modest evidence of potentially decreasing pain/burning. Gabapentin was seen in one study to work alone and synergistically with ALA. Other treatments included vitamins, benzydamine hydrochloride, bupivacaine, Catuama, olive oil, trazodone, urea, and *Hypericum perforatum*. Of these other treatments, Catuama and bupivacaine were the only ones with significant positive results in symptom improvement. ALA, topical clonazepam, gabapentin, and psychotherapy may provide modest relief of pain in BMS. Gabapentin may also boost the effect of ALA. Capsaicin is limited by its side effects. Catuama showed potential for benefit. Future studies with standardized methodology and outcomes containing more patients are needed.

### **Geriatric oral and maxillofacial dysfunctions in the context of geriatric syndrome.**

**Author(s):** Nam, Y; Kim, N-H; Kho, H-S

**Source:** Oral diseases; Apr 2018; vol. 24 (no. 3); p. 317-324

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

**Abstract:**OBJECTIVETo propose the application of the concept of geriatric syndrome for common geriatric oral and maxillofacial dysfunctions and to suggest the necessity of developing effective evaluation methods for oral and maxillofacial frailty.DESIGNThe concepts of frailty and geriatric syndrome based on multi-morbidity and polypharmacy were applied to five common geriatric oral medicinal dysfunctional problems: salivary gland hypofunction (dry mouth), chronic oral mucosal pain disorders (burning mouth symptoms), taste disorders (taste disturbances), swallowing disorders (dysphagia), and oral and maxillofacial movement disorders (oromandibular dyskinesia and dystonia).RESULTSEach of the dysfunctions is caused by various kinds of diseases and/or conditions and medications, thus the concept of geriatric syndrome could be applied. These dysfunctions, suggested as components of oral and maxillofacial geriatric syndrome, are associated and interacted with each other in a complexity of vicious cycle. The resulting functional impairments caused by this syndrome can cause oral and maxillofacial frailty.CONCLUSIONSGeriatric oral and maxillofacial dysfunctions could be better appreciated in the context of geriatric syndrome. The development of effective methods for evaluating the severity of these dysfunctions and the resulting frailty is essential.

### **Analysis of the reliability of the Italian version of the Oral Behaviours Checklist and the relationship between oral behaviours and trait anxiety in healthy individuals.**

**Author(s):** Donnarumma, V; Cioffi, I; Michelotti, A; Cimino, R; Vollaro, S; Amato, M

**Source:** Journal of oral rehabilitation; Apr 2018; vol. 45 (no. 4); p. 317-322

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

**Abstract:**BACKGROUNDThe Oral Behaviours Checklist (OBC) is a valid 21-item instrument quantifying the self-reported frequency of oral behaviours. An Italian version (OBC-It) has been released recently. Anxiety and oral behaviours are known to be associated in individuals with oro-facial pain due to temporomandibular disorders (TMD). However, information about this relationship in pain-free individuals is still limited.OBJECTIVESThe aim of this study was to test the reliability of the OBC-It and its reduced version (OBC-It 6), focusing on tooth clenching-related wake-time oral behaviours, and the effect of patient instructions on reliability. A second aim was to test the association between

trait anxiety and oral behaviours in pain-free individuals. **METHODS** Two hundred and eighty-two TMD-free students, divided into 2 groups (Group A,  $n = 139$ , mean age  $\pm$  SD =  $22.6 \pm 5.4$  years; Group B,  $n = 143$ ,  $23.7 \pm 4.2$  years), filled in the State-Trait Anxiety Inventory and the OBC-It. Group B received instructions about the OBC-It, while Group A did not. After 2 weeks, both groups filled in the OBC-It again. However, Group B was further divided into 2 subgroups, B1 and B2. The first received the same instructions again, while B2 did not. **RESULTS** The test-retest reliability of the OBC-It (A: ICC = .87; B1 : ICC = .94; B2 : ICC = .95) and OBC-It 6 (A: ICC = .85; B1 : ICC = .89; B2 : ICC = .93) was excellent in all groups. Trait anxiety was weakly associated with OBC-It only in women ( $R^2 = .043$ ,  $P = .021$ ). **CONCLUSIONS** The OBC-It is a reliable tool but further subjects' instructions might be needed. Trait anxiety has a limited effect on oral behaviours in TMD-free subjects.

### **Plasma N-acylethanolamine and endocannabinoid levels in burning mouth syndrome: Potential role in disease pathogenesis.**

**Author(s):** Barry, Alison; O'Halloran, Ken D; McKenna, Joseph P; McCreary, Christine;

**Source:** Journal of oral pathology & medicine : official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology; Apr 2018; vol. 47 (no. 4); p. 440-442

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

**Abstract:** **OBJECTIVE** The objective was to measure endocannabinoid (eCB) ligands and non-cannabinoid N-acylethanolamine (NAE) molecules in plasma from individuals with burning mouth syndrome (BMS) and to determine whether plasma eCB/NAE levels correlated with pain, inflammation and depressive symptomatology in this cohort. **STUDY DESIGN** Plasma content of the eCBs, anandamide (AEA) and 2-arachidonoyl-glycerol (2-AG), and the NAE molecules, palmitoylethanolamide (PEA) and oleoylethanolamide (OEA) were assessed in healthy subjects ( $n = 8$ ) and in a cohort of newly diagnosed BMS patients ( $n = 9$ ) using liquid chromatography-tandem mass spectrometry. Plasma eCBs and NAE profiles were correlated with self-rated oral cavity pain intensities, depressive symptomatology and plasma IL-8 levels. **RESULTS** Plasma levels of PEA, but not OEA, AEA or 2-AG, were significantly elevated in patients with BMS, when compared to plasma from healthy individuals. Plasma PEA, OEA and AEA levels correlated with depressive symptomatology. **CONCLUSIONS** This is the first evidence to indicate that circulating eCB/NAE levels are altered in BMS.

### **Using fatigue and pain interference to predict pain status 3-7 years later: Longitudinal insights in chronic orofacial pain populations**

**Author(s):** Boggero I.A.; Ramirez M.V.R.; Carlson C.R.

**Source:** Psychosomatic Medicine; Apr 2018; vol. 80 (no. 3)

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

**Abstract:** Chronic orofacial pain is a broad term referring to pain disorders felt in the mouth, jaw, face, and head that last longer than three months, and affect approximately 10% of the population in the United States. Cross-sectionally, fatigue and pain interference, defined as pain-related disruptions with social, recreational, and occupational activities, are associated with worse pain outcomes in orofacial pain population. However, little is known about how these factors longitudinally predict pain. To test this, data were collected from 288 patients seeking treatment for orofacial pain at a tertiary university pain clinic. At their initial appointment, patients provided data on pain intensity, pain interference, and fatigue. Approximately 3-7 years following their initial appointment (mean = 5.01 years, SD = 1.6 years, range = 2.4-7.9 years), patients provided online follow-up data about their pain. Of the 288 patients, 78 no longer reported any pain at follow up (27.1%). Binomial logistic regressions tested whether fatigue and pain interface at the initial visit predicted whether patients reported pain or not at follow-up. All models controlled for pain

intensity at the initial visit. Results revealed marginally significant effects for fatigue such that for each unit increase in fatigue at the initial timepoint, the likelihood of being in pain at follow-up increased by 1.6% (Wald  $\chi^2(1) = 3.74$ ,  $p = .053$ ). For each unit increase in pain interference at the initial timepoint, the likelihood of being in pain at follow-up increased by a significant 3.7% (Wald  $\chi^2(1) = 9.06$ ,  $p = .003$ ). These results suggest that pain interference and fatigue are important predictors of pain over time in orofacial pain populations. Early interventions targeting pain interference may be particularly helpful for improving pain outcomes over time and for promoting pain resilience.

### **Effect of opioids on oral health status among institutionalised drug addicts in a District of Rajasthan, India**

**Author(s):** Gijwani D.; Singh S.; Aggarwal V.P.; Sharma A.; Goyal N.; Setia S.; Mmathur A.

**Source:** Journal of Clinical and Diagnostic Research; Apr 2018; vol. 12 (no. 4)

**Publication Type(s):** Article

Available at [Journal of Clinical and Diagnostic Research](#) - from Europe PubMed Central - Open Access

**Abstract:**Introduction: According to the World Health Organisation survey, 2004, opioid is one of the most common forms of drug used by drug abusers in India. The total number of registered opium abusers in India is estimated to be 1.4 million. The state in India with the maximum consumption of opium is seen in Punjab and Rajasthan when compared to the other states. Aim: To assess the oral health status and related practices of opium drug users in Sri Ganganagar, Rajasthan, India.

Materials and Methods: The present cross-sectional study was conducted on 577 institutionalised adult male, drug addicts from across Rajasthan and Punjab. Comparison was made with duration of addiction to investigate any differences in oral health status. A standardised, pre-validated questionnaire was used to collect data on tooth brushing and its frequency, duration of drug abuse and oral complication like dry mouth, burning mouth, taste impairment and eating difficulty along with clinical examination to record Oral Hygiene Index-Simplified (OHI-S), Community Periodontal Index (CPI), and Decayed Missing Filled Surface (DMFS) index. The statistical significant analysis was done by t-test, Chi-square and level of significance was set at  $p < 0.05$ . Multiple linear regression model was used to find out the association between duration of addiction and CPI, OHI-S and DMFS score. Results: The mean age of the patients was  $38.2 \pm 11.89$  years. Maximum addiction was seen in the age group of 18-24 years ( $n=158$ , 27.4%). Significantly higher mean scores of OHI-S, CPI, Decayed Missing Filled Teeth (DMFT) and DMFS score were reported among the patient on drug abuse of opioids for more than five years. Around half of the patients reported brushing their teeth at least once. Multiple linear regression model showed very high DMFS score which were associated with longer duration of drug addiction and no tooth brushing. Conclusion: The present study demonstrates poor oral health behaviour, worse periodontal health and higher caries experience among opium abusers, it is important to develop a specialised awareness protocol towards oral healthcare for the societies where such drug dependency is widespread. Copyright © 2018, Journal of Clinical and Diagnostic Research. All rights reserved.

### **Short-Lasting Unilateral Neuralgiform Headache Attacks.**

**Author(s):** Levy, Andrew; Matharu, Manjit S.

**Source:** Annals of Indian Academy of Neurology; Apr 2018; vol. 21

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

Available at [Annals of Indian Academy of Neurology](#) - from Europe PubMed Central - Open Access

**Abstract:** Short-lasting unilateral neuralgiform headache attacks (SUNHA) is characterized by strictly unilateral trigeminal distribution pain that occurs in association with ipsilateral cranial autonomic features. There are two subtypes: short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT) and short-lasting unilateral neuralgiform headache attacks with cranial autonomic symptoms (SUNA). These disorders are rare but highly disabling. The management of SUNHA can be challenging. The abortive therapies are not generally useful as the attacks are relatively short-lasting. A myriad of pharmacological preventive treatments has been tried in single case reports or small series in an open-label fashion. Lamotrigine, as an oral preventive treatment, and lidocaine, as an intravenous transitional treatment, seems to be the most effective therapies. For medically intractable SUNHA, several surgical approaches have been tried. These include ablative procedures involving the trigeminal nerve or the Gasserian ganglion, microvascular decompression (MVD) of the trigeminal nerve, and neurostimulation techniques. MVD, occipital nerve stimulation, and ventral tegmental area deep brain stimulation have all been found to be effective in open-label series with relatively high-response rates. There is a considerable clinical, therapeutic, and radiological overlap between SUNCT, SUNA, and trigeminal neuralgia (TN). Despite being considered distinct conditions, the emerging evidence suggests a broader nosological concept of SUNCT, SUNA, and TN; these conditions may constitute a continuum of the same disorder, rather than separate clinical entities. Consideration needs to be given to classifying SUNHA with TN as a cranial neuralgia rather than as a trigeminal autonomic cephalalgia.

#### **Orofacial pain and quality of life in early adolescents in India.**

**Author(s):** Kumar, Sandeep; Badiyani, Bhumi K.; Kumar, Amit; Dixit, Garima; Sharma, Prachi;

**Source:** International Journal of Adolescent Medicine & Health; Apr 2018; vol. 30 (no. 2)

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

**Abstract:** Background: Orofacial pain may have an impact on quality of life. It may affect the overall well-being of an individual. Objective: To assess the prevalence of orofacial pain and its impact on quality of life in early adolescents in Indore city, India. Methods: This was a cross-sectional study which included a total of 800 children selected from various public and private schools located in Indore city, India. A questionnaire was developed which collected information on sociodemographic characteristics and previous dental visits. The severity of pain was assessed using Von Korff pain scale and quality of life using the General Health Questionnaire 12 (GHQ-12). The chi-square test and logistic regression analysis were performed. Results: The overall prevalence of orofacial pain was found to be 17.9%. Toothache (10.1%) was found to be the most prevalent orofacial pain followed by temporomandibular joint pain (4.3%). The highest severity of pain (Grades 3 and 4) was reported for toothache followed by temporomandibular joint pain. The results of the logistic regression model showed that the prevalence of orofacial pain (odds ratio=7.18, p-value<0.0001a) was strongly associated with poor quality of life. Conclusion: The orofacial pain has a negative influence on the quality of life of adolescents. Effective policies should be created to improve the quality of life of adolescents focusing on oral health education and prevention of oral diseases.

#### **Burning Mouth Pain: A Case Report.**

**Author(s):** Oberoi-Jassal, Ritika; Portman, Diane; Smith, Joshua; Rajasekhara, Sahana; Desai, Vijay V

**Source:** Journal of oncology practice; Mar 2018 ; p. JOP1700080

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

Available at [Journal of oncology practice](#) - from EBSCO (MEDLINE Complete)

#### **The efficacy of fluoxetine in BMS-A cross-over study.**

**Author(s):** Zoric, Bojana; Jankovic, Ljiljana; Kuzmanovic Pficer, Jovana; Zidverc-Trajkovic, Jasna; Mijajlovic, Milija; Stanimirovic, Dragan

**Source:** Gerodontology; Mar 2018

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

**Abstract:**BACKGROUND Burning mouth syndrome (BMS) is an intraoral burning or dysaesthetic sensation, recurring daily for more than two hours during the period longer than 3 months. The objective was to evaluate and analyse the efficacy of serotonin reuptake inhibitor fluoxetine on psychological factors, as well as on pain in participants with BMS. METHODS In a 6-month study, 100 participants with primary and secondary BMS were divided into two groups-fluoxetine and control (placebo) and examined by the dentist and the neurologist. Depression and anxiety were estimated by Hamilton Scale for Depression (HAM-D) and Anxiety (HAM-A) and Beck Depression Inventory (BDI) and the pain intensity by visual analogue scale (VAS). RESULTS Mean age of the participants was 60.33 in fluoxetine group and 67.4 in control group. Most of the participants were female-74% in the fluoxetine and 78% in the control group. Statistical difference between the fluoxetine and the control group was found in HAM-D results ( $P < .05$ ). Values of other scales and VAS decreased significantly after the therapy in both groups ( $P < .05$ ). CONCLUSIONS Our trial results indicate that fluoxetine therapy not only improves the psychological status of participants with BMS but also fluoxetine decreases the intensity of pain in these patients.

#### **A patient's view on the location of the temporomandibular joint.**

**Author(s):** Koole, Paul; Zonnenberg, Adriaan J J; Mulder, Jan

**Source:** Cranio : the journal of craniomandibular practice; Mar 2018 ; p. 1-4

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

**Abstract:**Objective A survey was held to establish whether laypeople knew the location of their temporomandibular joint. Methods A sample of 61 participants, visiting their dental office for a routine check-up, was given a three-question survey of whether they knew the location of their temporomandibular joint and could point to this location. Results Thirty-eight participants answered the question affirmatively. Only 13 pointed to the correct location. Of these, six participants received consultation for TMD in the past, three participants were healthcare providers, and four participants actually had knowledge of the exact location. Out of 23 participants who did not know the location, one accidentally designated the correct position. Conclusion The location of the temporomandibular joint is not a well-known site for many patients. In the presence of orofacial pain, it seems advisable to let the patient designate and record the site of the pain on a drawing on the patient chart.

#### **Are pharmacological treatments for oro-facial pain effective?**

**Author(s):** Fischhoff, Debra; Spivakovsky, Silvia

**Source:** Evidence-based dentistry; Mar 2018; vol. 19 (no. 1); p. 28-29

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

**Abstract:**Data sources Electronic searches of PubMed, the Cochrane Library, Embase, the National Health Service Economic Evaluation Database and HTA until March 2017. Also handsearched referenced in the original articles. Grey literature was not included. Study selection Randomised controlled trials with more than ten participants with oro-facial pain duration of more than three months were sub grouped into: TMD-muscle pain (TMD-m), TMD-joint pain (TMD-j), burning mouth syndrome (BMS) and other oro-facial pain. Studies include any pharmacological treatment against another pharmacological, non-pharmacological treatment, placebo or no treatment. The primary outcome was change in pain intensity and the secondary outcome was the effect on quality of life. Data extraction and synthesis Three authors formed three review pairs that independently



checked for inclusion. Four pairs of reviewers independently evaluated the risk of bias using the Swedish Agency for Health Technology Assessment and Assessment of Social Services tool. Two authors independently extracted data that were later assessed according to a modified GRADE system. Results Forty-one studies, rated medium to low risk of bias, were included in qualitative analysis on patients with TMD-j pain (15 studies, n = 790), TMD-m pain (nine studies, n = 375), BMS (17 studies n = 868). For the TMD-j group five studies support NSAIDs and nine corticosteroid and hyaluronate injections. Eight of the nine TMD-m studies were included in a network meta-analysis (NMA), they support cyclobenzaprine, botulinum toxin injections and topical treatment with Ping-On ointment. Five of the 17 BMS studies included in a NMA support topical capsaicin and clonazepam. Of the remaining 12, five showed no effect while the remaining support alpha lipoic acid, gabapentin, clonazepam, amisulpride and SSRIs. Conclusions Based on the results of the NMA the authors concluded that clonazepam and capsaicin are effective for BMS while cyclobenzaprine, a muscle relaxant, has a positive treatment effect on TMJ-m. Evidence from the narrative synthesis suggests NSAIDs, corticosteroid and hyaluronate injections are effective for TMD-j pain.

### **History of Burning Mouth Syndrome (1800-1950): a review.**

**Author(s):** Périer, Jean-Matthieu

**Source:** Oral diseases; Mar 2018

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

**Abstract:** OBJECTIVE This medical history historic literature review aims at understanding the evolution of the medical existence of burning mouth syndrome (BMS) over times. METHOD Three historic research tools were used (Medic@, IndexCat, Gallica) with several keywords, exploring the years 1800-1950. Results 150 documents were obtained dating from 1803 to 1937, including 55 reviews, 44 original articles, 40 quotations, and 11 medical dictionaries. A total of 199 cases of BMS were reported which allowed for a narrative review of the early history of BMS (1800-1950). This review spans from the description of the first clinical cases by several authors in Europe to the creation of the syndrome by the French Academy of Medicine, its intellectual sponsorship by the emerging discipline of neuropsychiatry, to its subsequent evolution until the conceptual shift of the American authors. Conclusions A better knowledge of the evolution of the nosology of BMS throughout history should bring a better understanding of current approaches for treating such an affection. This article is protected by copyright. All rights reserved.

### **The Burden of Orofacial Pain in A Socially Deprived and Culturally Diverse Area of the United Kingdom.**

**Author(s):** Joury, Easter; Bernabe, Eduardo; Gallagher, Jennifer E; Marcenes, Wagner

**Source:** Pain; Mar 2018

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

**Abstract:** Little is known about the burden and impact of orofacial pain in deprived areas, and whether it mediates the relationship between socio-economic position (SEP) and impacts on daily life. We analysed data from a representative sample of 2,168 adults, aged 16-65 years, from the East London Oral Health Inequality study. Participants completed a validated questionnaire on demographics, SEP (area deprivation), orofacial pain (by anatomical site) in the past month and impacts related to oral conditions on daily life. Negative binomial regression models with robust variance estimator were fitted. The prevalence of orofacial pain was high (30.2%). The most common subset of orofacial pain was intraoral pain (27.5%). The prevalence of pain related to temporomandibular disorders (TMD) was 6.8%. The most common subsets of intraoral pain were tooth (20.4%) and gingival (11.4%) pain. Orofacial pain, its subsets (intraoral and TMD-related pain), and intraoral pain subsets (tooth and gingival pain) consistently showed associations with all

dimensions of impacts on daily life that were highly statistically significant: functional limitation, psychological discomfort, disabilities and handicap. Socio-economic inequalities were present in orofacial pain and some dimensions of impacts on daily life. Orofacial pain did not mediate the relationship between area deprivation and impacts on daily life. Our study demonstrated a substantial burden and impact of orofacial pain in a socially deprived and culturally diverse area of the UK. To address this burden, interventions that lie within the remit of health services are needed to improve access to dental care for adults with orofacial pain.

**Evaluation of laser therapy and alpha-lipoic acid for the treatment of burning mouth syndrome: a randomized clinical trial.**

**Author(s):** Barbosa, Natália Guimarães; Gonzaga, Amanda Katarinny Goes;

**Source:** Lasers in medical science; Mar 2018

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

**Abstract:**The aim of this study was to evaluate the efficacy of low-level laser therapy (LLLT) and alpha-lipoic acid (ALA) in the treatment of burning mouth syndrome (BMS) and secondary oral burning (SOB) by unstimulated sialometry, symptom assessment, and measurement of salivary TNF- $\alpha$  levels. Forty-four patients were randomized into four treatment groups: BMS/laser (n = 10), BMS/ALA (n = 5), SOB/laser (n = 15), and SOB/ALA (n = 14). The control group consisted of eight healthy female subjects. Unstimulated salivary flow was measured before and after treatment, and the collected saliva was stored at - 20 °C for the analysis of TNF- $\alpha$ . Symptoms were evaluated before and after treatment using a pain visual analog scale. Most patients were women (81.8%) during menopause (72.2%). LLLT and ALA were efficient in increasing salivary flow only in BMS but provided symptom relief in both conditions. TNF- $\alpha$  levels did not differ between patients with BMS and SOB or between those patients and the control group. No differences were observed in posttreatment TNF- $\alpha$  levels in either condition. The results of this study suggest that LLLT and ALA are efficient therapies in reducing burning mouth symptoms, with LLLT being more efficient than ALA.

**Comparison between burning mouth syndrome patients with and without psychological problems.**

**Author(s):** Kim, M-J; Kim, J; Kho, H-S

**Source:** International journal of oral and maxillofacial surgery; Mar 2018

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

**Abstract:**The purpose of this study was to compare clinical and socio-demographic characteristics between burning mouth syndrome (BMS) patients with and without psychological problems. Of 644 patients with symptoms of oral burning, 224 with primary BMS were selected on the basis of laboratory testing, medical history, and psychometric tests: 39 with psychological problems (age 62.5 $\pm$ 11.5years) and 185 without psychological problems (age 58.4 $\pm$ 11.4years). Comprehensive clinical and socio-demographic characteristics, including psychological profiles and salivary flow rates, were compared between the two groups. No significant difference in sex ratio, duration and diurnal pattern of symptoms, unstimulated whole saliva flow rate, or marital status was found between the groups. The patients with psychological problems had a significantly higher mean age, reduced stimulated whole saliva flow rate, and lower level of education than those without psychological problems. The patients with psychological problems also displayed higher rates and greater severity of various types of BMS-related symptom in most parts of the oral mucosa, higher rates of stress-related symptoms, and greater difficulties in daily activities. The severity of taste disturbance was the factor most significantly correlated with the level of psychometry. In conclusion, psychological problems in BMS patients are associated with an aggravation of BMS symptoms.

### **Is burning mouth syndrome a neuropathic pain condition?**

**Author(s):** Jääskeläinen, Satu K

**Source:** Pain; Mar 2018; vol. 159 (no. 3); p. 610-613

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

**Abstract:** Primary burning mouth syndrome (BMS) is defined as an "intraoral burning or dysaesthetic sensation, recurring daily... more than 3 months, without clinically evident causative lesions" (IHS 2013). In addition to pain, taste alterations are frequent (dysgeusia, xerostomia). Although lacking clinical signs of neuropathy, more accurate diagnostic methods have shown neuropathic involvement at various levels of the neuraxis in BMS: peripheral small fiber damage (thermal quantitative sensory testing, electrogustatometry, epithelial nerve fiber density), trigeminal system lesions in the periphery or the brainstem (brainstem reflex recordings, trigeminal neurography, evoked potentials), or signs of decreased inhibition within the central nervous system (deficient brainstem reflex habituation, positive signs in quantitative sensory testing, neurotransmitter-positron emission tomography findings indicative of deficient striatal dopamine function). Abnormalities in electrogustatometry indicate the involvement of the small A $\delta$  taste afferents, in addition to somatosensory small fibers. According to these findings, the clinical entity of BMS can be divided into 2 main subtypes compatible with either peripheral or central neuropathic pain, which may overlap in individual patients. The central type does not respond to local treatments and associates often with psychiatric comorbidity (depression or anxiety), whereas the peripheral type responds to peripheral lidocaine blocks and topical clonazepam. Burning mouth syndrome is most prevalent in postmenopausal women, having led to a hypothesis that BMS is triggered as a consequence of nervous system damage caused by neurotoxic factors affecting especially vulnerable small fibers and basal ganglia in a setting of decrease in neuroprotective gonadal hormones and increase in stress hormone levels, typical for menopause.

### **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; Mar 2018; vol. 125 (no. 3); p. e37

**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.

### **Oral epithelial MUC1 and oral health.**

**Author(s):** Kho, H-S

**Source:** Oral diseases; Mar 2018; vol. 24 (no. 1-2); p. 19-21

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

**Abstract:**OBJECTIVE To provide information about MUC1, epithelial membrane-bound mucin, in terms of its role in oral health. DESIGN The expression and functional roles of MUC1 in the oral mucosa and salivary glands were reviewed. Information on the modulation of oral mucosal epithelial MUC1 expression compared with that of endometrial epithelial MUC1 expression was also reviewed. In addition, the possible associations between oral mucosal epithelial MUC1 and oral diseases were explored. RESULTS MUC1 is expressed in the oral mucosa and major and minor salivary glands. Protection of oral mucosal surfaces is believed to be the main function of oral mucosal epithelial MUC1. Its role in the salivary glands is thought to facilitate salivary flow through the ductal system. Information on the role of MUC1 in signal transduction and modulation of immune function in the oral cavity is sparse. However, the possible roles of MUC1 in dry mouth conditions, burning mouth syndrome, dental caries, and oral candidiasis have been suggested. CONCLUSIONS Despite limited information, it is clear that oral epithelial MUC1 plays an important role in oral health. Further research evaluating the physiological and pathological roles of MUC1 in the oral cavity is warranted.

#### **A new target for the treatment of trigeminal neuralgia with botulinum toxin type A.**

**Author(s):** Wu, Chuanjie; Xie, Nanchang; Liu, Hongbo; Zhang, Haifeng; Zhang, Lu; Lian, Yajun

**Source:** Neurological sciences : official journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology; Mar 2018; vol. 39 (no. 3); p. 599-602

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

**Abstract:**Trigeminal neuralgia (TN) is typically treated pharmacologically with anticonvulsants, but these can be ineffective, or can lose their effectiveness over time. In recent years, botulinum toxin type A (BoNT-A), when injected subcutaneously across multiple sites, can effectively treat TN. However, approximately 30% of TN cases are refractory to subcutaneous BoNT-A treatment. We report here the case of a 79-year-old female patient with TN presenting as severe, episodic pain in the lower left gingival area. She was on anticonvulsant therapy (carbamazepine) for about 3 years prior to BoNT-A treatment. Despite initial relief, the pain not only recurred, but also began to worsen, even as her carbamazepine dose was increased substantially. We injected 50 U of BoNT-A into the oral mucosa of the painful gingival area, but the patient's pain was unaffected. We then changed to an intramuscular injection protocol and injected the same dose of BoNT-A into the left masseter, which produced a good therapeutic effect for about 5 months; she was then administered a second treatment (intra-masseter), and at a 2-week follow-up, still reported being pain-free. This case and a survey of the literature suggest that BoNT-A injection protocols maybe closely correlated with their clinical efficacy in cases of TN, possibly due to the ability of BoNT-A to be transported retrogradely along trigeminal nerve axons. We believe that finding the optimal BoNT-A therapy injection protocol(s) will significantly reduce the number of refractory cases of TN.

#### **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; Mar 2018; vol. 47 (no. 3); p. 281-285

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

**Abstract:**OBJECTIVES Oral 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 METHODS** In 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. **RESULTS** Oral 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. **CONCLUSION** There is no association between oral dysesthesia and the presence or load of oral Candida.

### **The role of psychological factors in the development of burning mouth syndrome.**

**Author(s):** Yoo, H S; Jin, S H; Lee, Y J; Song, C M; Ji, Y B; Tae, K

**Source:** International journal of oral and maxillofacial surgery; Mar 2018; vol. 47 (no. 3); p. 374-378

**Publication Date:** Mar 2018

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

**Abstract:** The psychiatric profiles of 50 patients diagnosed with burning mouth syndrome (BMS) were compared to those of 50 age- and sex-matched individuals as the control group. The Symptom Checklist-90-Revised (SCL-90-R) questionnaire was used to evaluate the role of psychological factors in the development of BMS. Somatization, obsessive-compulsive, depression, anxiety, hostility, phobic anxiety, psychoticism, global severity index (GSI), positive symptom total (PST), and positive symptom distress index (PSDI) scores were significantly higher in the patients with BMS than in the control group. In a subgroup analysis according to sex, women with BMS had higher T-scores for somatization, obsessive-compulsive, paranoid ideation, GSI, PST, and PSDI than women in the control group. In contrast, only the PSDI score was significantly higher in men with BMS compared to men in the control group. There was a significant difference in the T-scores for somatization, psychoticism, and GSI between the three age subgroups ( $\leq 50$ , 51-65, and  $\geq 66$  years). The obsessive-compulsive and PSDI scores were significantly higher in patients with BMS who also had at least one chronic disease than in patients with BMS who had no chronic disease. In conclusion, psychological factors are correlated with BMS.

### **A magnetic resonance study and demonstration of the spectrum of diverse aetiologies for trigeminal neuralgia**

**Author(s):** Soundarapandian A.; Rajan S.C.; Renuka A.; Malik A.; Veeraiyan S.

**Source:** Journal of Clinical and Diagnostic Research; Mar 2018; vol. 12 (no. 3)

**Publication Type(s):** Article

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**Abstract:** Introduction: Intractable hemifacial pain or twitching can be an incapacitating disorder caused by trigeminal neuralgia. The aetiologies for trigeminal neuralgia are numerous and the most frequent cause is a neurovascular compression. However, there are other less common aetiologies which need to be assessed. Magnetic Resonance Imaging (MRI) with dedicated cranial nerve sequences remains the modality of choice in diagnosing and establishing a cause for this condition. Aim: This study aims in showing that all trigeminal neuralgias are not secondary to neurovascular compression and other unusual causes needs to be looked for and assessed during an MRI examination. Materials and Methods: This was a cross-sectional observational study conducted at

the Saveetha Medical College and Hospital, Chennai, India (from September 2015 to August 2017). This study included 70 patients presenting with clinical symptoms of unilateral trigeminal neuralgia. The MRI was done using a 1.5 Tesla, Philips multiva system. A high resolution 3D T2 DRIVE or 3D bFFE cranial nerve sequences were performed in addition to the routine Magnetic Resonance (MR) sequences. Patients with known dental issues which could cause the pain, and patients with intracranial tumours were excluded from the study. Results: Out of the 70 patients, we found that the majority (53) had a neurovascular compression, which ranged from a simple indentation by a tortuous Superior Cerebellar Artery (SCA) to full blown vertebrobasilar dolichoectasia. Out of the remaining cases, six were found to be secondary to benign intracranial hypertension with prominent Meckel's caves. There were two cases who had an unusual finding of "Trigeminal pontine sign", which were post infective (postherpetic being the most probable cause). Conclusion: By tailoring the MRI protocol in present study, and based on the clinical presentation, we can conclude that in most cases of clinically diagnosed trigeminal neuralgia, it could be possible to demonstrate a probable cause and consequently aid the clinician for appropriate management, and to select only the deserving cases for microvascular decompression. Copyright © 2018, Journal of Clinical and Diagnostic Research. All rights reserved.

## Oral ulceration

### Haematinic deficiencies and patient clinical profiles in Polish patients with recurrent aphthous stomatitis (RAS)

**Author(s):** Slebioda Z.; Krawiecka E.; Szponar E.; Dorocka-Bobkowska B.

**Source:** Journal of Oral Pathology and Medicine; 2018

**Publication Date:** 2018

**Publication Type(s):** Article In Press

**Abstract:**Background: Recurrent aphthous stomatitis is a common ulcerative disorder of the oral mucosa, where the immune impairment may develop in genetically predisposed subjects exposed to certain environmental factors. The aim of the study was to investigate the frequency of anaemia, iron and vitamin B12 deficiency in recurrent aphthous stomatitis (RAS) and to explore its impact on the clinical presentation of RAS. Methods: A total of 141 adults including the following: 71 subjects with RAS and 70 controls were enrolled in the study. A detailed dental and haematological assessment, including full blood count, serum iron and vitamin B12 evaluation, was performed in all study participants. The results were statistically analysed with Mann-Whitney, Kruskal-Wallis, chi2 and Fisher tests with  $P < .05$  designated as a significance level. Results: Recurrent aphthous stomatitis patients were found to suffer anaemia, iron and vitamin B12 deficiency more frequently than the controls. The mean serum iron levels were also significantly lower in RAS subjects than in controls, although still within the norm. The lowest mean serum iron levels were observed in patients with a mild course of RAS. No significant differences in mean serum iron and vitamin B12 levels were revealed as a function of stratification according to the number of lesions per single flare-up. Conclusions: The results of our study indicate an association between iron and vitamin B12 deficiency and RAS in a Polish population. However, as the haematinic deficiencies did not significantly modify the course and clinical phenotype of the disease, further studies to explore their role in RAS aetiology are required. Copyright © 2018 John Wiley & Sons A/S.

**Database:** EMBASE

## 2. Chemical composition, antibacterial and antioxidant activities of essential oils of *Dryobalanops lanceolata* burck. Leaf

**Author(s):** Kuspradini H.; Putri A.S.; Mitsunaga T.

**Source:** Research Journal of Medicinal Plant; 2018; vol. 12 (no. 1); p. 19-25

**Publication Date:** 2018

**Publication Type(s):** Article

**Abstract:**Background and Objective: *Dryobalanops lanceolata* (*D. lanceolata*) Burck is one of the plant species from Dipterocarpaceae family which have several medicinal purposes such as mouth ulcers, abscesses, boils and cold sores. The stem barks of *D. lanceolata* have antibacterial and cytotoxic properties against human breast cancer. While, the tree produce a clear yellow-aromatic resin, scientific support for the essential oil from this plant and its uses is still limited. This research was aimed to obtain the essential oil from leaves of *D. lanceolata* and to evaluate the antibacterial activities as well as antioxidant activity by in vitro research. Materials and Methods: The essential oil from *D. lanceolata* leaves was characterized by gas chromatography mass spectrometry (GC-MS). This oil was obtained by steam distillation and presented eugenol (28.73%), gamma-terpinene (15.60%), 2-beta-Pinene (9.80%) and 1-Limonene (8.09%) as the major compounds. The antibacterial activity and antioxidant effect of essential oil from the leaves of *D. lanceolata* were determined. The antibacterial activities of *D. lanceolata* oil were observed in vitro on *Streptococcus sobrinus* (*S. sobrinus*) and *Streptococcus mutans* (*S. mutans*) strains. The oil was investigated against two standard references using agar well diffusion method. The antioxidant activity was assayed by DPPH (1,1-Diphenyl-2-picrylhydrazyl) and using ascorbic acid as positive control. Results: The yield of *Dryobalanops lanceolata* oil obtained in the present study was 0.12%. The oil was active against *S. sobrinus* and *S. mutans*. The *Dryobalanops lanceolata* oil also has potency to inhibit the free radicals at concentration 1.5625-25 ppm, which the IC<sub>50</sub> was 14.28 ppm. Conclusion: These results demonstrate that *Dryobalanops lanceolata* oil has high antimicrobial activity for bacterial that cause dental caries disease and are antioxidant. Copyright © 2018 Harlinda Kuspradini et al.

**Database:** EMBASE

### 3. Mucous Membrane Pemphigoid with Ocular Involvement: The Clinical Phenotype and Its Relationship to Direct Immunofluorescence Findings.

**Author(s):** Ong, Hon Shing; Setterfield, Jane F; Minassian, Darwin C; Dart, John K; Mucous Membrane Pemphigoid Study Group 2009–2014

**Source:** Ophthalmology; Apr 2018; vol. 125 (no. 4); p. 496-504

**Publication Date:** Apr 2018

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

**PubMedID:** 29217149

**Abstract:**PURPOSEThis study explored the validity of the First International Consensus on Mucous Membrane Pemphigoid (MMP) guidance, which recommends that clinically indistinguishable patients, who have direct immunofluorescence (DIF)-negative biopsies, be excluded from a diagnosis of MMP. Misdiagnosis, or delayed diagnosis, of MMP with ocular involvement leads to the inappropriate use of topical therapy, the standard of care for causes of cicatrizing conjunctivitis other than MMP, rather than systemic immunomodulatory therapy, resulting in irreversible clinical deterioration in patients with MMP.DESIGNProspective, cross-sectional study.PARTICIPANTSPatients meeting the clinical criteria of ocular MMP, including those with positive and negative DIF findings.METHODSA case report form was used to collect the demographic details, the clinical history, and the results of a detailed clinical assessment by ophthalmologists, otolaryngologists, dermatologists, and oral medicine specialists. All anatomic sites potentially affected by MMP were examined apart from the esophagus (and larynx in a subset). The DIF results were recorded.MAIN OUTCOME MEASURES Differences between DIF-positive and -negative patients in demography, sites

of involvement, and disease severity as determined by the degree of conjunctival scarring (using Tauber staging), central corneal disease (vascularization, scarring, ulceration, and conjunctivalization), history of conjunctival or lid surgery, and requirement for systemic immunotherapy at the time of screening. RESULTS A total of 73 patients with ocular MMP were recruited, of whom 20 of 73 (27.4%) had ocular-only disease. There was no significant demographic or clinical difference between patients with positive and negative DIF results. This finding included differences in disease severity for which the only significant difference was that of more severe central corneal disease in DIF-negative patients. Asymptomatic disease at different sites was frequent. CONCLUSION These findings do not support the classification of DIF-negative patients, meeting the clinical criteria for ocular MMP, as having a different disease. This category of patients should be accepted as having DIF-negative MMP, for clinical management purposes, with patients having inflamed eyes being treated with systemic immunomodulatory therapy. The frequent finding of asymptomatic ocular, oral, and nasopharyngeal MMP is clinically significant and implies that these sites should be routinely screened in asymptomatic patients.

**Database:** Medline

#### **4. Prevalence of Sleep Bruxism in IBD Patients and Its Correlation to Other Dental Disorders and Quality of Life.**

**Author(s):** Bucci, C.; Amato, M.; Zingone, F.; Caggiano, M.; Iovino, P.; Ciacci, C.

**Source:** Gastroenterology Research & Practice; Mar 2018 ; p. 1-5

**Publication Date:** Mar 2018

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

Available at [Gastroenterology Research and Practice](#) - from Europe PubMed Central - Open Access

Available at [Gastroenterology Research and Practice](#) - from Hindawi Open Access Journals

Available at [Gastroenterology Research and Practice](#) - from International DOI Foundation

**Abstract:** Background. Patients with inflammatory bowel diseases could experience mouth and teeth disorders and alterations in psychological mood. Vice versa, the psychological status may influence the presence of oral diseases. Aim. To evaluate in inflammatory bowel disease patients the prevalence of sleep bruxism and its correlation with the presence of oral diseases, quality of sleep, and psychological disturbances. Methods. Patients were consecutively recruited in our clinic and examined for temporomandibular disorders, dental enamel disorders, sleep bruxism, and recurrent aphthous stomatitis by two dentists. Patients also underwent Pittsburgh Sleep Quality Index and Beck Depression Inventory Scale questionnaires. Results. 47 patients and 46 controls were included. Sleep bruxism and enamel wear disorders were more frequent in Crohn's disease patients when compared with ulcerative colitis patients and controls ( $p=0.03$  and  $p=0.02$ , resp.). Among groups, no differences were noted for enamel hypoplasia, temporomandibular disorders, recurrent aphthous stomatitis, depression, and quality of sleep. We found a positive correlation between bruxism and temporomandibular disorders (Spearman 0.6,  $p=0.05$ ) (Spearman 0.3,  $p<0.005$ ). Conclusion. Bruxism and enamel wear disorders should be routinely searched in Crohn's disease patients. Moreover, the attention of healthcare givers to sleep disturbances should be addressed to all inflammatory bowel disease patients.

**Database:** CINAHL

#### **5. Squamous Cell Carcinoma of the Gingiva Mimicking Periodontal Disease: A Diagnostic Challenge and Therapeutic Dilemma.**

**Author(s):** Bornstein, Michael M.; Andreoni, Claude; Meier, Thomas; Yiu Yan Leung



**Source:** International Journal of Periodontics & Restorative Dentistry; Mar 2018; vol. 38 (no. 2); p. 253-260

**Publication Date:** Mar 2018

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

**Abstract:** A case of squamous cell carcinoma of the gingiva (GSCC) in the left anterior maxilla in a 64-year-old woman that was treated for almost 5 years as suspected periodontal lesion prior to establishing the final diagnosis of oral cancer is presented in this case report. GSCCs have a variable clinical appearance, ranging from an exophytic mass to ulcerative lesions. They have been reported to pose a diagnostic challenge and are not infrequently initially misdiagnosed as periodontal disease. A delay in diagnosis and extraction of teeth in the vicinity of GSCCs has been demonstrated to increase the risk for lymph node metastasis and thus result in a lower 5-year survival rate. To avoid misdiagnosis and delay of the appropriate treatment, a proper histopathologic evaluation is mandatory whenever an incisional biopsy is performed. Furthermore, referral to a specialist in oral medicine or oral and maxillofacial surgery is indicated when a gingival lesion is nonresponsive to treatment, recurring, or rapidly growing in size.

**Database:** CINAHL

## 6. Delayed Diagnosis of Gorlin-Goltz Syndrome: The Importance of the Multidisciplinary Approach.

**Author(s):** Figueira, Jéssica Araújo; Batista, Fábio Roberto de Souza; Rosso, Karina; Veltrini, Vanessa Cristina; Pavan, Angelo José

**Source:** The Journal of craniofacial surgery; Mar 2018

**Publication Date:** Mar 2018

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

**PubMedID:** 29521748

**Abstract:** Gorlin-Goltz syndrome (GGS), also known as nevoid basal cell carcinoma syndrome, is an autosomal dominant inherited disorder with high penetrance and variable expressivity. The classic triad originally described by Gorlin and Goltz in 1960 is composed of multiple nevoid basal cell carcinomas (NBCCs), odontogenic keratocysts (OKCs) in the jaws and bifid ribs. In 1977, this triad was modified by Rayner et al, and to GGS diagnosis, the OKCs had to appear in combination with calcification of the cerebellar falx or palmar and plantar pits. It may occur that although GGS syndrome is a well-known condition, only the specific symptom could be observed by different specialists. Therefore, the patient cannot be placed in an always complex clinical panel. The authors introduce an example in this report. In the present case, the patient had NBCCs, OKCs, and probably other signs of GGS since 1998, and has been treated for these conditions separately, without a diagnosis of a syndromic condition. A 54-year-old white woman was referred to the oral medicine service due to a cyst located in the right mandibular body. She had a history of skin cancer and undergone surgeries and radiotherapies for the lesions' treatment, scars on the skin face due to the lesions removed, and a new ulcerated lesion on the back of the head was diagnosed. In addition, the patient presented frontal and parietal bossing leading to increased cranial circumference, hypertelorism, strabismus, broad base, and mandibular prognathism. On image examination, skull radiography revealed calcification of the falx cerebri; on chest X-ray a bifid rib was observed and spine radiography showed vertebral osteophytes. Panoramic radiograph showed a well-defined bilocular radiolucent image located in the posterior and anterior mandibular region. The whole elements induced us to investigate the patient's past medical history, which revealed that since 1998 she had the diagnosis of NBCC and OKC. A multidisciplinary approach becomes necessary for the diagnosis and follow-up of patients with GGS, considering the complexity of the clinical manifestations. Therefore, it is of

primary importance for dental surgeons and dermatologists to know the signs and symptoms of GGS to perform early diagnosis and to avoid progression of the oral cysts or metastasis of the skin lesions.

**Database:** Medline

## Potentially malignant lesions

### 1. Ameloblastic fibro-odontoma with chondroid tissue formation

**Author(s):** Aly N.; Amer H.; El Khatib O.

**Source:** Współczesna Onkologia; 2018; vol. 22 (no. 1); p. 50-53

**Publication Date:** 2018

**Publication Type(s):** Review

Available at [Współczesna Onkologia](#) - from Europe PubMed Central - Open Access

Available at [Współczesna Onkologia](#) - from ProQuest (Hospital Premium Collection) - NHS Version

**Abstract:**Ameloblastic fibro-odontoma (AFO) is an uncommon, benign, mixed odontogenic tumour occurring predominantly in children and adolescents. The purpose of this study was to report an unusual case of AFO in the mandible of a five-year-old male patient showing evidence of chondroid tissue formation. Clinical, radiographic, histopathological and immunohistochemical findings were presented. Intraoral examination revealed a swelling extending from the right deciduous lateral incisor to the left second molar area. Computed tomography (CT) showed a large, well-demarcated multilocular radiolucency with radiopaque deposits. Histologically, the lesion was composed of connective tissue stroma resembling the dental papilla, with epithelial islands, and amorphous masses of enamel and dentin consistent with a diagnosis of AFO, as well as, evidence of large areas showing cartilaginous tissue formation. Immunohistochemistry using cytokeratin, vimentin and s-100 were helpful in determining the origin of the different odontogenic tissues. Surgical excision of the lesion was performed. The patient has been monitored and the lesion has not recurred. We report the first case of AFO showing an unusual behaviour of chondroid tissue formation. Copyright © 2018 Termedia Publishing House Ltd. All rights reserved.

**Database:** EMBASE

### 2. Livedo reticular por hipotermia durante anestesia para tratamento odontológico em paciente com síndrome de Down Livedo reticularis by hypothermia during anesthesia for dental treatment in Down's syndrome patient

**Author(s):** Penna H.D.M.; Paiva D.H.D.; Modolo N.S.P.

**Source:** Brazilian Journal of Anesthesiology; 2018

**Publication Date:** 2018

**Publication Type(s):** Article In Press

**Abstract:**Background: Livedo reticularis (LR) is a benign dermatological condition characterized by ischemic areas permeated by erythematous-cyanotic areas in a lacy pattern, and may be transient or permanent and is frequently associated with body exposure to cold. Cutaneous arterial vasospasm promotes ischemia, and venous dilation of the congested areas occurs by tissue hypoxia or autonomic dysfunction. Patients with Down's syndrome (DS), due to their physiological peculiarities, constitute a representative part of those who require dental care under general anesthesia, and LR has a reported incidence of 8% to 12% in DS patients. Objectives: Describe the physiological livedo

reticularis (LR) in a DS patient, with the onset during the anesthetic-surgical procedure. Case report: 5-year-old female patient with DS, admitted for dental treatment under balanced general anesthesia with sevoflurane, fentanyl, and atracurium. There was the occurrence of transoperative hypothermia, with axillary temperature reaching 34.5 degreeC after 30 minutes after the beginning of anesthesia. At the end of the procedure, red-purplish skin lesions interspersed with areas of pallor were observed exclusively on the ventromedial aspect of the right forearm, with no systemic signs suggestive of allergic reactions. The established diagnosis was physiological LR. There was a total fading of the lesions within 5 days. Conclusion: This report evidences the need for thermal control of patients undergoing anesthesia, as well as the manifestation of LR as a consequence of transoperative hypothermia. Copyright © 2018 Sociedade Brasileira de Anestesiologia

**Database:** EMBASE

### 3. Pindborg tumor: Pathology with special stains.

**Author(s):** Gotmare, Swati Shrikant; Pereira, Treville; Shetty, Subraj; Kesarkar, Kashmir S

**Source:** Indian journal of pathology & microbiology; 2018; vol. 61 (no. 2); p. 239-241

**Publication Date:** 2018

**Publication Type(s):** Case Reports

**PubMedID:** 29676366

Available at [Indian journal of pathology & microbiology](#) - from EBSCO (MEDLINE Complete)

**Abstract:** Odontogenic tumors constitute a wide spectrum of lesions ranging from malignant and benign neoplasms to dental hamartomas, all derived from the epithelial and ectomesenchymal remnants of the tooth forming apparatus. Calcifying epithelial odontogenic tumor (CEOT) is an uncommon, benign epithelial odontogenic tumor first described by Pindborg in 1956. It is a universally accepted eponym for this neoplasm. Pindborg tumor or CEOT is a locally aggressive neoplasm that accounts for 1% of the total odontogenic tumors, with recurrence in 14% of cases. The etiology of this tumor remains an enigma to the clinician. Pindborg suggested that the tumor arises from the remnants of reduced enamel epithelium of an unerupted tooth. Recent studies in literature report that the tumor arises from stratum intermedium. We report a case of Pindborg tumor in a 22-year-old male patient in the left mandibular posterior region. Radiographically, a well-defined radiolucency was associated with unerupted mandibular second molar which was displaced to the inferior border of the mandible. Along with routine haematoxylin and eosin stains, this case reports histopathological findings using Congo red stain and modified Gallegos stain.

**Database:** Medline

### 4. 3D cone beam computed tomography reconstruction images in diagnosis of ameloblastomas of lower jaw: A case report and mini review.

**Author(s):** Li, Dize; Yang, Zhiqiang; Chen, Tao; Guan, Chao; Wang, Feilong; Matz, Ethan L; Zhang, Yuanyuan; Ji, Ping

**Source:** Journal of X-ray science and technology; 2018; vol. 26 (no. 1); p. 133-140

**Publication Date:** 2018

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

**PubMedID:** 29480235

**Abstract:** Cone beam computed tomography (CBCT) has obvious advantages over regular radiography in diagnosis of complex diseases. Objective of this study is to report a case of a mandibular jaw ameloblastoma recurring cyst, which represents a benign tumor of odontogenic

epithelium, using CBCT imaging technology. CBCT examination of the patient suffering with recurrent lower jaw cyst (relapsing four years after surgery) showed a decrease in irregular bone density and appearance of a honeycomb pattern (3.5 cm×2.5 cm×1.8 cm) in the right lower jaw. This suggests that the lesion is more likely to be an ameloblastoma. Preoperative tissue biopsy and pathological examination of surgical sample confirmed the diagnosis. Surgical resection of the diseased tissue and autogenous bone grafting in the mandible was performed. Postoperative CBCT examination showed that the bone defect healed well, without recurrence of the tumor 22 months postoperatively. In conclusion, the rotated 3D CBCT images clearly displays the exact size, location, borders and internal changes of the tumor in the jaw cyst itself and the adjacent tissues. Thus, the dental CBCT allows clinicians to better evaluate lesions, leading to better treatment outcomes.

**Database:** Medline

### 5. Non-Hodgkin's Lymphoma of the mandible in HIV patient - A Rare Case Report.

**Author(s):** Neerupakam, Mahesh; Prakash, Jacob; Koduri, Sridevi; Vishnubhatla, Thejasri

**Source:** Contemporary clinical dentistry; 2018; vol. 9 (no. 1); p. 110-113

**Publication Date:** 2018

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

**PubMedID:** 29599595

Available at [Contemporary Clinical Dentistry](#) - from Europe PubMed Central - Open Access

Available at [Contemporary Clinical Dentistry](#) - from ProQuest (Hospital Premium Collection) - NHS Version

Available at [Contemporary Clinical Dentistry](#) - from contempclindent.org

**Abstract:** Non-Hodgkin's lymphoma (NHL) is a lymphatic system tumor originating from either B or T lymphocytes and shows a high malignant potential. In HIV-seropositive patients, NHL of head and neck is mainly found in Waldeyer's ring, oral mucosa, salivary glands, paranasal sinuses, and laryngeal tissue. Primary NHL rarely affects the bone. When the lesion affects the bones of the jaws, it is rare in the mandible when compared to the maxilla. In the reported cases, only 0.6% are found in the mandible. NHL of the mandible can be difficult to diagnose, and so the prime aim of the present case report is to establish appropriate diagnosis of one of such kinds. Clinically, they may imitate a dental infection with symptoms of pain and discomfort. A delay in diagnosis may lead to a poor prognosis. Herewith, we present a case of NHL on the lower-right mandible in a 40-year-old male. A correlation of clinical findings, radiological examination, and histopathological examination enabled us in early diagnosis and differentiating it from other similar conditions, thus aiding in initiation of prompt treatment.

**Database:** Medline

### 6. Bovine dental graft as a cause of secondary membranous nephropathy

**Author(s):** Motazedi T.; Franquiz M.; Bajaj M.; Mandayam S.

**Source:** American Journal of Kidney Diseases; Apr 2018; vol. 71 (no. 4); p. 568-569

**Publication Date:** Apr 2018

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

**Abstract:** We describe a case of secondary membranous nephropathy temporally related to placement of a bovine dental graft. A 66 year old male with a history of Type II Diabetes, well controlled HTN and CAD, and recent bovine dental graft placement was referred to nephrology for

sudden increase in urine protein with new onset bilateral lower extremity edema. He was in his usual state of health until he noticed lower extremity swelling with foamy urine. His endocrinologist noted 11.3g of protein on 24hr urine, and creatinine clearance of 156 ml/min. These findings were concerning for abrupt onset nephrotic syndrome. He was initiated on ramipril with little improvement in proteinuria. Renal biopsy showed membranous glomerulonephritis (MGN) with negative PLA2R suggestive of secondary MGN, with granular IgG deposits in the subepithelial region with no C3, C4 or C1q. HIV and Hepatitis panels were negative, with PSA 3.5. CT of the chest, abdomen, and pelvis were negative for malignancy. Urine protein/creatinine ratio gradually came down to 2895 mg/g with improvement in edema over 6 weeks. Given negative workup thus far, the patient's bovine dental graft is suspicious for the cause of his MGN. Most idiopathic MGN is caused by subepithelial deposition of M-type phospholipase A2 receptor avid IgG (anti-PLA2R). The pathogenesis of idiopathic MGN not caused by anti-PLA2R antibodies is less clear, and many of these cases may be due to undescribed non-glomerular antigens. Two well designed studies have identified Bovine Serum Albumin (BSA) as a cause of secondary MGN in humans. There are several established animal models which utilize BSA to induce MGN. In this unique case of secondary MGN the absence of anti-PLA2R antibodies, absence of common secondary causes, and temporal association with exposure to bovine antigens suggests iatrogenic cause.

**Database:** EMBASE

### **7. Oral health and chemotherapy act as cofactors in malnutrition in the elderly with other cancers than head and neck malignancies.**

**Author(s):** El Osta, Nada; El Osta, Lana; Lassauzay, Claire; Ghosn, Marwan; Tubert-Jeannin, Stephanie; Hennequin, Martine

**Source:** Clinical oral investigations; Apr 2018

**Publication Date:** Apr 2018

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

**PubMedID:** 29607456

**Abstract:**OBJECTIVE This study explores whether the chemotherapy regimen has a role in inducing oral health problems and malnutrition in elderly patients with other cancers than head and neck malignancies. MATERIAL AND METHODS An observational cross-sectional study was designed to compare the relationships between oral health and nutritional status between four groups of elderly differing in cancer or chemotherapy regimen. Data were collected using a questionnaire including the Mini-Nutritional Assessment (MNA), the Geriatric Oral Health Assessment Index (GOHAI) and questions about perception of xerostomia. The oral examinations recorded the number of functional dental units (PFU) and the presence of oral lesions. RESULT The sample comprised 46 patients receiving chemotherapy, 48 patients on a non-chemotherapy regimen, 45 persons in complete remission not under treatment and 53 non-cancer patients. Oral health perception was significantly worse in chemotherapy patients. They reported limiting the kinds of food they consumed, the discomfort felt when eating and took medications for oral pain. Oral lesions were frequent in chemotherapy participants. Nutritional status was related to the cancer treatment regimen (OR = 4.17; p value = 0.017), the presence of oral lesions (OR = 4.51; p value = 0.003), perception of xerostomia (OR = 3.54; p value = 0.012), the number of PFU (OR = 2.51; p value = 0.046) and GOHAI score (OR = 1.617; p value = 0.019). CONCLUSION The presence of oral lesions and the chemotherapeutic regimen were highly associated with nutritional status in older patients with cancer. CLINICAL RELEVANCE Dental professionals should be asked to intervene preventively and per-therapy to optimise oral health status in elderly patients with other cancers than head and neck malignancies.

**Database:** Medline

### **8. Dental Pulp Status of Posterior Teeth in Patients with Oral and Oropharyngeal Cancer Treated with Radiotherapy: 1-year Follow-up.**

**Author(s):** Gupta, Nishtha; Grewal, Mandeep S; Gairola, Munish; Grewal, Stutee; Ahlawat, Parveen

**Source:** Journal of endodontics; Apr 2018; vol. 44 (no. 4); p. 549-554

**Publication Date:** Apr 2018

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

**PubMedID:** 29452716

**Abstract:**INTRODUCTIONTeeth may react negatively to pulp sensitivity testing in patients who have undergone radiotherapy. The aim of the current investigation was to evaluate the pulp sensibility of posterior teeth at 4, 6, and 12 months in patients who have undergone radiotherapy for oral and oropharyngeal malignancies.METHODSSeveny-nine patients diagnosed with malignant oral and oropharyngeal cancer undergoing radiotherapy underwent cold thermal pulp sensitivity testing and electric pulp testing of 4 teeth, 1 from each quadrant. The results were recorded at 5 different time points (TPs): before radiotherapy (TP1), at the end of radiotherapy at 66-70 Gy (TP2), 4 months after the completion of radiotherapy (TP3), 6 months after the completion of radiotherapy (TP4), and 12 months after the completion of radiotherapy (TP5).RESULTSAll 288 teeth tested positive to cold thermal pulp sensitivity testing and electric pulp testing (EPT) at TP1 (100%). No tooth responded to the cold test (100%) at TP4 and TP5, and progressively higher EPT values were noted during the observation period. A statistically significant difference existed in the number of positive responses between different TPs.CONCLUSIONSThere was a progressive decrease in pulp sensibility from TP1 to TP5 in teeth of patients with oral and oropharyngeal cancer who underwent radiotherapy (66-70 Gy). No response to cold thermal tests was noted at TP4 (6 months) and TP5 (12 months), and teeth responded at increasingly higher EPT values from TP1 through TP5. This result was statistically significant.

**Database:** Medline

### **9. Refined Approach to Preservation of the Inferior Alveolar Nerve during Resection and Primary Reconstruction of the Mandible**

**Author(s):** Tereshchuk S.; Sukharev V.

**Source:** Craniomaxillofacial Trauma and Reconstruction; Mar 2018

**Publication Date:** Mar 2018

**Publication Type(s):** Article In Press

**Abstract:**Sacrifice of the inferior alveolar nerve (IAN) during resection of the mandible is taken as a rule. In 1987, Jensen and Nock described a technique that permitted placement of dental implants in the atrophied mandibular alveolar ridge that lacked sufficient vertical height superior to the mandibular canal. This technique was used by some authors to preserve continuity of the IAN during resection of the mandible in patients with benign tumors. The described techniques are traumatic, time-consuming, and not precise. We propose a new refined technique of preservation of IAN with use of a guide to approach mandibular canal, cutting guides with a slot for a relocated IAN, and a new approach to positioning of the fixating screws. We assessed the effectiveness of this new technique with use of an electro-odontometer. In 21 cases, we demonstrated a refined approach to preservation of the IAN. In 7 patients (33%), the IAN was preserved on one side and in 14 patients (67%), on both sides. Sensation in the lower lip was restored in 18 patients (86%). These patients generally recovered sensation within 22 days postoperatively. This proposed technique makes preservation of IAN easier, faster, less traumatic, and more predictable. In this article, we describe

criteria for the patients with cancer of oral mucosa to be admitted for this procedure. Restored sensation in the lower lip of the patients who have undergone resection of the mandible significantly improves their quality of life. Copyright © 2017, Thieme Medical Publishers. All rights reserved.

**Database:** EMBASE

## 10. Bilateral thigh pain in an adolescent athlete

**Author(s):** Krebs P.A.; Walrod B.

**Source:** Clinical Journal of Sport Medicine; Mar 2018; vol. 28 (no. 2)

**Publication Date:** Mar 2018

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

**Abstract:**History: A 15 year old female field hockey player presented to the office with bilateral thigh pain of 1 week duration. She described the pain as a soreness that was worse with activity and would occasionally become a shooting pain down her thighs. The onset of the pain correlated with the start of 2 a day practices. The pain was worse with activity and had progressed to the point where she was unable to complete practices due to the severity. She was also starting to have night pain. She denied numbness, tingling, or weakness, but did describe heaviness in her legs. She denied recent trauma. She had participated in similar activities during previous seasons without issues. She denied any current medical conditions. History of one prior radial fracture while skiing 2 years previously which healed without complication and a quad strain 4 months prior which had resolved. Treatments included decreasing activity in practice, ice baths, and exercises with her athletic trainer. Physical Exam: Right/Left Hip: Full range of motion, no tenderness to palpation, normal strength. Right/Left knee: Full range of motion, no tenderness to palpation, normal strength. Bilateral Upper Leg: patient points to pain in her bilateral quads, but there is no tenderness to palpation in this region, no palpable mass or defect, no bruising, no pain with active knee extension or hip flexion. Differential Diagnosis: 1. Bilateral Stress Fractures 2. Bilateral Quadriceps Strains 3. Thigh Splints 4. Myofascial pain 5. Metabolic Abnormality (rhabdomyolysis, electrolyte abnormality, etc) Test Results: X-rays of bilateral femurs did not show any osseous abnormality. A metabolic workup (CBC, CMP, CK) was obtained. CBC did not show any significant abnormalities. CK was 74 U/L. CMP showed an Alkaline Phosphatase (ALP) of 29 U/L (normal 75-274 for 15 year old female), otherwise no significant abnormalities. Final Diagnosis: Hypophosphatasia. Discussion: Hypophosphatasia (HPP) is an inborn error of metabolism caused by a mutation in the ALPL gene coding for the tissue nonspecific isoenzyme of alkaline phosphatase (TNSALP). This gene is transcriptionally active in the skeleton, kidney, liver, and developing teeth. Over 300 mutations have been found. The condition can be autosomal recessive or dominant creating a broad range of severity and presentations. There are 7 clinical forms of HPP (odonto, adult, childhood, infantile, perinatal, benign prenatal, and pseudo HPP). Biochemically, HPP demonstrates low serum ALP levels in addition to elevated substrates. Possible presentations in the adult form, which our patient was believed to have, include history of early loss of deciduous teeth, premature dental loss, extraskeletal calcification, chondrocalcinosis, slow healing stress fractures most often in the metatarsals, pseudofractures, skeletal pain, joint pain, and muscle weakness. The differential diagnosis for a low serum ALP level includes osteogenesis imperfecta, hypothyroidism, Cushing's disease, bisphosphonate therapy, milkalkali syndrome, vitamin D intoxication, Wilson's disease, hypomagnesemia, celiac disease, pernicious anemia, and some malignancies. Outcome: The patient was referred to Endocrinology for further evaluation. Rest was recommended while further evaluation was completed. She saw endocrinology who ordered additional labwork. TFTs, IGF1, B6, and Vitamin D were within normal limits. Genetic testing of the ALPL gene found that the patient was heterozygous for an exon 3 ALP gene mutation resulting in a frame shift and confirming the diagnosis of hypophosphatasia. She was started on asfatase alfa. Follow-up: Over the next several months she experienced an improvement

in her symptoms and she was able to return to field hockey the following season. She also noticed improved energy, mood, and stamina on the medication. On review, she had no history of delayed walking, short stature, early loss of deciduous teeth, seizures, metatarsal stress fractures, chondrocalcinosis, pseudofractures, or known family history of hypophosphatasia.

**Database:** EMBASE

### **11. Autogenous Partial Bone Chip Grafting on the Exposed Inferior Alveolar Nerve After Cystic Enucleation.**

**Author(s):** Seo, Mi Hyun; Eo, Mi Young; Cho, Yun Ju; Kim, Soung Min; Lee, Suk Keun

**Source:** The Journal of craniofacial surgery; Mar 2018; vol. 29 (no. 2); p. 486-490

**Publication Date:** Mar 2018

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

**PubMedID:** 29077687

**Abstract:** This prospective study evaluated the clinical effectiveness of the new approach of partial autogenous bone chip grafts for the treatment of mandibular cystic lesions related to the inferior alveolar nerve (IAN). A total of 38 patients treated for mandibular cysts or benign tumors were included in this prospective study and subsequently divided into 3 groups depending on the bone grafting method used: cystic enucleation without a bone graft (group 1), partial bone chip graft covering the exposed IAN (group 2), and autogenous bone graft covering the entire defect (group 3). We evaluated the symptoms, clinical signs, and radiographic changes using dental panorama preoperatively, immediate postoperatively, and at 1, 3, 6, and 12 months postoperatively. Radiographic densities were compared using Adobe Photoshop CS5 (Adobe Systems Inc., San Jose, CA). Repeated measures analysis of variance was used for statistical evaluation with SPSS 22.0 (SPSS Inc, Chicago, IL), and  $P < 0.05$  was considered statistically significant. Radiopacities were the most increased at 1 year postoperative in group 3; groups 2 and 3 did not show statistically significant differences, whereas groups 1 and 3 were statistically significant. In terms of radiographic bone healing with clinical regeneration of the exposed IAN, healing occurred in all patients, although the best healing was achieved in group 2. This autogenous partial bone chip grafting procedure to cover the exposed IAN is suggested as a new surgical protocol for the treatment of cystic lesions associated with the IAN.

**Database:** Medline

### **12. A rare case of oral metastasis of colon adenocarcinoma.**

**Author(s):** Romanet, I; Lan, R; Ordioni, U; Albertini, A F; Campana, F

**Source:** Journal of stomatology, oral and maxillofacial surgery; Feb 2018

**Publication Date:** Feb 2018

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

**PubMedID:** 29475082

**Abstract:** INTRODUCTION Metastatic carcinoma of the colon is frequently encountered. In the literature, metastasis of malignant tumors in the buccal cavity are rare. They represent less than 1% of oral malignant lesions. OBSERVATION We present a case of oral metastasis of colon adenocarcinoma in the mandible of a 62-year-old patient. The physical examination revealed a swelling in the mandibular symphysis associated with dental displacement. The panoramic X-ray showed significant bone lysis of the symphysis. The neoplastic tissue showed marked positivity for Cytokeratin 20 and CDX2, confirming the diagnosis of metastasis of the oral cavity from colorectal



adenocarcinoma. DISCUSSION Metastatic adenocarcinoma from the colon to the oral cavity are rare but should be included in the differential diagnosis of tumors in the oral cavity.

**Database:** Medline

### **13. A Retrospective 20-Year Analysis of Proliferative Verrucous Leukoplakia and Its Progression to Malignancy and Association with High-risk Human Papillomavirus.**

**Author(s):** Upadhyaya, Jasbir D; Fitzpatrick, Sarah G; Islam, Mohammed N; Bhattacharyya, Indraneel; Cohen, Donald M

**Source:** Head and neck pathology; Feb 2018

**Publication Date:** Feb 2018

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

**PubMedID:** 29427033

**Abstract:** Proliferative verrucous leukoplakia (PVL) is defined as an aggressive, relentless and recalcitrant form of leukoplakia that has a high propensity for malignant transformation. The aim of this study was to evaluate the malignant potential of PVL and determine its possible association with high-risk human papillomavirus (HPV). Twenty cases with a clinical and biopsy proven diagnosis of PVL were collected from the University of Florida Oral Medicine clinic database.

Immunohistochemistry was performed to evaluate the expression of p16INK4A and p53 genes in the PVL lesions. The lesions were also tested for high-risk HPV by DNA in-situ hybridization. The average age of the patients at the time of first biopsy was 62.7 years. Most patients had multiple sites of involvement, gingiva being the most common location. The lesions progressed to malignancy in approximately 50% of patients. The expression of p16INK4A gene was considered negative, with at least a 50-65% immunoreactivity observed in only three cases that progressed to malignancy. No expression of high-risk HPV was detected, whereas p53 staining was positive in less than 25% of the cells demonstrating gene expression. No definite association between PVL and high-risk HPV infection could be established. Due to the high transformation potential of PVL, early recognition with aggressive treatment, including multiple biopsies, and continued close clinical follow-up, remain the mainstay of favorable management of this condition.

**Database:** Medline

### **14. Retrospective study of odontogenic tumors: A clinicopathological analysis**

**Author(s):** Egal E.; Shinomia S.; Passos H.; Alexandre G.; Amstalden E.; Altemani A.; Mariano F.

**Source:** American Journal of Clinical Pathology; Jan 2018; vol. 149

**Publication Date:** Jan 2018

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

**Abstract:** Odontogenic tumors (TOs) consist of a group of heterogeneous lesions of varied clinical and histological behavior, derived from the epithelium, ectomesenchyma and/or mesenchyma of the dental apparatus or its remnants. They range from tumor malformations (hamartomas) to benign neoplasms and metastatic malignancies. They are rare entities composing only 1% of the tumors of the maxillofacial region, making specific protocols and therapeutic guidelines not available. Early diagnosis and good therapeutic planning contribute to a better prognosis. Objectives: The objective of this study was to perform a retrospective clinical and pathological analysis of the TOs, in order to establish casuistry in our service. Methods: We performed a retrospective survey of the patients who developed TOs from 1980 and were treated in our institution. Clinicopathological data were collected from medical records with the aid of a standardized record for the study. Histopathological

analysis of H&E slides was performed for histological confirmation of tumor types. Results: In this study, 73 patients who had OTs were analyzed. The age ranged from 2 to 78 years, with an average of 36.4 years. A total of 48 (65.75%) were female patients, and 25 (34.25%) were male patients. A total of 46 patients (63%) presented with involvement of the mandible. The maxilla was affected in 21 of the cases (28.76%). As for the histopathological report, 13 (17,80%) were ameloblastoma, 10 (13.69%) odontogenic tumor, eight (10.59%) odontogenic cyst without any other specification, four (5.47%) dendritic cysts, fibromas, two (2.74%) composite odontomas, one (1.37%) complex odontoma, and one mixed odontoma, one myxoma, one fibrous dysplasia with associated aneurysmal cyst, one cyst odontogenic calcifying, one fibro-odontoma, and 25 unspecified cases. Conclusion: The collected samples added epidemiological data to the literature and covered the main histological subtypes of TOs, including some rare ones. The data contribute to international indexes and reinforce clinicopathological findings of these tumors.

**Database:** EMBASE

### **15. Paediatric oral pathology in Thailand: a 15-year retrospective review from a medical teaching hospital.**

**Author(s):** Tawevisit, Mana; Tantidolthanes, Warisa; Keelawat, Somboon; Thorner, Paul Scott

**Source:** International dental journal; Jan 2018

**Publication Date:** Jan 2018

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

**PubMedID:** 29377105

**Abstract:**OBJECTIVE To determine whether the spectrum of oral pathology in children seen at a medical institution differs from studies derived from dental facilities. METHODS Oral biopsy records from paediatric patients (<16 years of age) were retrieved from the pathology archives at Chulalongkorn University Hospital over a period of 15 years. Lesions were categorised as inflammatory/reactive, tumour/tumour-like or cystic. RESULT Two-hundred and thirty biopsies were identified. Most lesions were inflammatory/reactive (62%), followed by tumour/tumour-like (35%) and cystic (3%). The largest proportion of lesions was found in the 12-16 years' age group. Mucocele was the most common lesion (38%), followed by hemangioma (8.3%), irritation fibroma (6%) and nevus (6%). The predominance of mucocele is similar to that in reports from other countries. The proportion of malignant tumours (5%) was higher than in other studies (<1-2%). In contrast, odontogenic cysts and odontogenic tumours were rare (3% and <1%, respectively), compared with published studies (7-35% and 2-21%, respectively). CONCLUSION This study from a medical institution shows a somewhat different spectrum of paediatric oral pathology compared with that reported from dental institutions. While some of the lesions may not be treated by dentists, they still need to be aware of these lesions because affected patients can still present initially to a dentist.

**Database:** Medline

### **16. Proliferative leukoplakia: proposed new clinical diagnostic criteria.**

**Author(s):** Villa, Alessandro; Menon, Reshma S; Kerr, Alexander R; De Abreu Alves, Fabio; Guollo, Andres; Ojeda, David; Woo, Sook B

**Source:** Oral diseases; Jan 2018

**Publication Date:** Jan 2018

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

**PubMedID:** 29337414

**Abstract:**OBJECTIVE We aimed to characterize proliferative verrucous leukoplakia (PVL) from a clinical and histopathologic standpoint and suggest an updated classification. SUBJECTS AND METHODS Records of patients seen at three oral medicine centers with a clinical diagnosis of PVL were reviewed for clinical and histopathologic features, and malignant transformation (MT). RESULT There were 42 patients (median age: 69 years [range:36-88]; 35 females). 12.2% were current smokers. Family history of cancer was present in 43.7% of patients. Partial demarcation of lesion margins was present in 31.3% of lesions, followed by verrucous (27.5%), smooth (22.7%), erythematous (22.3%), and fissured (18.3%) appearance. Large and contiguous, and multi-site and noncontiguous lesions, comprised 57.1% (24/42) and 35.7% (15/42) of PVL cases, respectively. 19.1% had prominent erythema (erythroleukoplakia). The most common histopathologic diagnosis at first visit was hyperkeratosis without dysplasia (22/42; 56.4%). MT occurred in 71.4% patients after a median of 37 months [range:1-210] from initial visit; erythroleukoplakia exhibited MT in 100% of cases. CONCLUSION The generic term "proliferative leukoplakia (PL)" may be more appropriate than PVL because 18.3% were fissured and 22.7% erythematous. We also propose the term proliferative erythroleukoplakia to more accurately describe the subset of PL with prominent erythema, which had the highest MT rate. This article is protected by copyright. All rights reserved.

**Database:** Medline

### 17. Spontaneous Resolution of a Confounding Insular Lesion.

**Author(s):** Haider, Ali S; Graffeo, Christopher S; Perry, Avital; Carlstrom, Lucas P; Burns, Terry C

**Source:** Cureus; Jan 2018; vol. 10 (no. 1); p. e2053

**Publication Date:** Jan 2018

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

**PubMedID:** 29541573

**Abstract:**Insular gliomas were previously considered inoperable lesions and were typically treated via biopsy, chemotherapy and/or radiation, if not observation alone. Stereotactic biopsies of low grade insular gliomas can underestimate tumor grade or fail to establish malignancy. Moreover, the survival advantages of maximal safe resection for insular lesions are increasingly being recognized. As such, early surgical resection is increasingly being performed. As with most lesions, a differential diagnosis exists for apparent insular gliomas, with definitive diagnosis generally obtained upon resection. We report an illuminating case that presented similarly to an insular glioma undergoing malignant transformation, but resolved spontaneously following a nondiagnostic biopsy. A 53-year-old female patient presented with aphasia and dizziness, followed by syncope and a 30-minute loss-of-consciousness. Imaging findings included a 12 mm region of contrast enhancement and central necrosis within a larger 3.5 cm expansile, T2-hyperintense lesion involving most of the left insula and extending into the anterior left temporal lobe. Imaging was felt most consistent with high-grade glioma. Stereotactic biopsy demonstrated nonspecific gliosis without definitive neoplastic tissue. A systemic workup was unrevealing, and thus an open procedure was subsequently planned in the intraoperative magnetic resonance imaging (MRI) suite. Preoperative MRI demonstrated interval resolution of the original lesion, despite profound T2 hyperintensity along the needle tract; thus, the planned resection was aborted. Subsequent imaging and systemic studies failed to establish a definitive infectious, neoplastic, autoimmune, or other diagnosis. However, poor dentition, history of a recent dental procedure, and the tiny central focus of diffusion restriction on the index MRI rendered abscess the most parsimonious explanation. On follow-up imaging, the lesion was noted to have further resolved without intervention. Our case illustrates the complexity of managing insular lesions and highlights the potential for alternate pathologies that can mimic insular glioma. Additionally, it provides a humbling reminder that, even in the presence of seemingly

pathognomonic imaging findings, a differential diagnosis of insular lesions must be thoughtfully considered in patient counseling and presurgical planning.

**Database:** Medline

### **18. Benign lymphoepithelial cyst of parotid gland: Review and case report.**

**Author(s):** Joshi, Jaya; Shah, Sonalee; Agarwal, Deepak; Khasgiwal, Ankit

**Source:** Journal of oral and maxillofacial pathology : JOMFP; Jan 2018; vol. 22 ; p. S91

**Publication Date:** Jan 2018

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

**PubMedID:** 29491615

Available at [Journal of Oral and Maxillofacial Pathology](#) - from Europe PubMed Central - Open Access

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Available at [Journal of Oral and Maxillofacial Pathology](#) - from PubMed Central

**Abstract:** Benign lymphoepithelial cyst (BLC), also known as branchial cyst, is an infrequent lesion usually occurs in the parotid gland or the lateral cervical area including lymph nodes. It occurs due to the process of lymphocyte-induced cystic ductular dilatation and is always diagnosed postoperatively by histopathological examination (HPE). These dysontogenetic lesions are usually found in the lateral neck but can also be located in the salivary glands, mostly in the parotids. A 35-year-old male reported to Government Dental College, Indore, before 3 years, with a soft, nontender, gradually increasing, compressible diffuse swelling involving the left parotid gland for the last 9-10 months of size 3.5 cm × 2.5 cm × 4.5 cm at the time of presentation with normal Stensen's duct and facial nerve function. ELISA test was negative, biochemistry indicated high protein content of aspirated fluid and magnetic resonance imaging showed hypertense cystic fluid in both T1- and T2-weighted images, suggesting high protein or hemorrhage and negating a solid lesion. Superficial parotidectomy was done with nonincidental healing. HPE of excisional tissue revealed it to be BLC.

**Database:** Medline

### **19. 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 Date:** Jan 2018

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

**PubMedID:** 29192691

**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.

**Database:** Medline

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April 2018, Volume 24, Issue 3

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March 2018, Volume 47, Issue 3



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