

Results: Our data unveil a different commensal flora in patients with OFG compared to that of our healthy controls. We have seen similar bacterial peaks in the two OFG groups and these peaks are not found in the healthy controls.

Conclusions: Our study showed that patients with OFG have a different commensal flora comparing to that of healthy controls.

Relevance: The loss of oral mucosal tolerance to food constituents, which is thought to play an important role in the pathogenesis of OFG may be instigated by a disturbed normal interplay between microorganisms and the mucosal immune system.

84

Salivary opiorphin as a potential marker of oral disease

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Objectives: Opiorphin is a mature product of the PROL1 (proline rich, lacrimal 1) protein, recently isolated from human saliva. Initial research on rats showed that this endogenous pentapeptide suppresses pain sensation more efficiently than morphine and with fewer adverse effects and it is able to elicit anti-depressive-like effects. The objective of this study is to quantify opiorphin levels in saliva of young healthy individuals in order to establish standard values for future comparisons with orofacial pain syndrome groups. We also pilot-measured opiorphin levels in burning mouth syndrome (BMS) patients.

Methods: We have developed an LC-MS/MS MRM method for measuring opiorphin in saliva samples. The highest yield on opiorphin was achieved by collecting saliva in previously chilled test tubes containing TFA (tetrafluoroacetic acid) designed for this purpose. We measured the concentration of opiorphin in 14 healthy volunteers between 19 and 30 years of age whose saliva was partially stimulated (stimulation only by collecting tube placed intra-orally), and stimulated by ascorbic acid. We also performed pilot study on BMS patients.

Results: Opiorphin levels in healthy volunteers between 19 and 30 years of age ranged from 2.8 to 25.9 ng ml⁻¹ (n = 14). TFA stabilized opiorphin in saliva samples up to 2 h at room temperature and up to 30 days at -20°C. There was no statistically significant difference between the sexes and the chemical stimulation of saliva resulted in no significant reduction of the level of opiorphin in both sexes. This paper also presents pilot results on opiorphin levels in BMS patients.

Conclusion: The described method is the first chromatographic method that enables the trace analysis of this salivary pentapeptide. It will enable future research to establish the correlation between the opiorphin levels and painful oral syndromes, and understand the role of opiorphin as a potential biomarker of oral diseases.

85

Mucosal lichen planus a systemic disease requiring multidisciplinary care

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Objectives: To emphasize the importance of seeing mucosal lichen planus as a systemic disease, not an isolated oral or genital disease, and to analyse the proportion of thyroid antibodies among patients with multimucosal lichen planus.

Methods: All patients were examined by both dentist and dermatologist and diagnosed with mucosal LP in 2007. All patients were consecutively included. Diagnosis of LP in oral and/or genital mucosa was confirmed by clinical and histological examination. Full medical histories from all patients were collected with special emphasis on autoimmune and thyroid disease. Sera were collected after oral and written informed consent, and analysed for thyroid antibodies and serology for herpes virus. The control group comprised 83 healthy volunteers matched regarding sex and age.

Results: The group diagnosed with lichen planus comprised 120 patients, 89 (74%) women with a mean age of 65 years and 31 (26%) men with a mean age of 57 years. The vast majority of the patients had multifocal lesions while oral lesions solely were found in 28% of females and 36% of males. Around half of the female patients were treated with levothyroxine due to thyroid disease. Antibodies against herpes simplex virus were found in 60% of the patients and 44% of the controls (P < 0.03).

Conclusion and relevance: Lichen planus with mucosal engagement should be considered a systemic disease and not as an isolated oral and/or genital disorder. Contradictory to many former reports most of our patients have multi mucosal disease which emphasizes the need for a multidisciplinary clinic in order to receive optimal care and treatment.

86

Anamnestic findings from patients having Recurrent Aphthous Stomatitis

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Objectives: The aim of this study was to evaluate associations between specific anamnestic information and different types of Recurrent Aphthous Stomatitis (RAS).

Methods: A group of 177 patients (mean age = 42.8 years; range 17–79 years) participated. Data was collected from a structured interview, consisting of 22 questions. Information about; (i) health status and medication, (ii) predisposing factors, (iii) RAS experience, (iv) previous treatment methods and (v) brand of tooth paste, was collected.

Results: 68% of the patients were healthy and 44% of the patients did not take any medication. 41% of the patients did not have any apprehension of the reason for their RAS, while stress (15.8%) was the most common apprehended etiological factor. Sixty-two percent had 1–3 minor ulcers at one time. Forty-eight percent reported having had a major aphthous ulcer at least once. The most common treatment for RAS was Zendum[™] toothpaste/mouthrinse (28%) followed by corticosteroids (25%). 54% of the patients experienced no relief of the inserted treatment. When toothpaste habits were investigated, Zendum[™] was used by 32% of the patients and Sodium-Lauryl-Sulfate containing toothpaste was used by 32%. There was no positive correlation between use of Zendum[™] toothpaste and relief of symptoms, size, number or frequency of the aphthous ulcers. 64% of the patients had never smoked, while 7% were smokers. No positive correlation was found when age, gender, allergy, medication and smoking were correlated to the frequency, number and size of the aphthous ulcers.

Conclusion: The etiology behind RAS is unclear and probably multifactorial. Standard treatment methods like Zendum[™] should perhaps be questioned and this study did not find any support for smoking as a 'protective' factor i.e. having a less likelihood of experiencing major problems from RAS.

Relevance: More research is needed in order to solve the etiology behind RAS.

87

Burning mouth syndrome and alexithymia

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Objectives: Burning mouth syndrome (BMS) is a distinctive nosological entity, including all forms of burning, stinging sensations, or pain in the mouth associated with an oral mucosa that appears clinically normal in the absence of local, dental, or systemic disease. Alexithymia ('no words for emotions') is a dimensional personality trait linked to psychosomatic or anxiety disorders. The present study assesses alexithymia's prevalence in BMS patients.

Methods: Sixty BMS patients participated in a clinical interview, and completed pain and psychometric questionnaires: Toronto Alexithymia Scale (TAS-20), Hamilton Anxiety Rating Scale (HARS), Montgomery & Asberg Depression Rating Scale (MADRS), Visual Analogue Scale (VAS), Paykell list. A TAS-20 score > 64 identified alexithymic patients.

Results: The mean TAS-20 score was 76.5 ± 8.5 and identified 44 alexithymic subjects (73.3%). The other ratings had the following mean values: HARS 23.6 ± 8.0 resulting 52 patients (86.7%) positive for anxiety; MADRS 7.9 ± 5.3 resulting in nine patients (15%) positive for depression; VAS 7.6 ± 1.7. Alexithymia is significantly related just to the depressive traits identified by the MADRS score (P = 0.007).

Conclusion: The prevalence of alexithymia in BMS patients in this study appeared significantly higher than the 10% reported in literature. Alexithymia implies impairment for dealing with negative factors at a mental level and painful feelings of depression could arise through physical symptoms. Therefore somatization could represent a way of coping with emotional stress related to depressive traits.

Relevance: Alexithymia may be strongly implicated in the pathogenesis BMS.

88

Treatment outcome of bisphosphonate induced osteonecrosis of the jaws

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Objective: To present treatment outcomes of Bisphosphonate Osteo-necrosis of the Jaws (ONJ).

Method: Eighty two patients with ONJ were enrolled. The patients were assessed by clinical symptoms, radiographs, and scintigraphy. Treatment outcomes were assessed by change in ONJ staging and VAS pain score after treatment.

Material: The cohort consists of 82 patients (25 men, 57 women). They were treated for multiple myeloma (n = 21), mamma cancer (n = 28), prostate cancer (n = 6),