ABSTRACTS

Abstracts on this page have been chosen and edited by Dr Trevor Watts

ORAL MEDICINE; BEHAVIOURAL SCIENCE

The evaluation of anxiety and salivary cortisol levels in patients with oral lichen planus

Koray M, Dülger O et al. Oral Diseases 2003; 9: 298-301

Both cortisol and anxiety were increased in oral lichen planus (OLP).

The relationship of stress and anxiety to OLP is unclear. In a Turkish clinic, 40 patients with OLP (mean age 35 yrs; 24 female) were compared with 40 controls (34 yrs; 22) who attended for general dental care. All were non-smokers. Because of the diurnal variation of salivary cortisol, stimulated saliva samples were collected between 0900 and 0915. State and trait anxiety were measured by Spielberger's questionnaire.

Mean salivary cortisol level was 1.46 µg/dl in the OLP group and 0.93 in the controls. Respective mean state anxiety scores were 49 and 39, and trait anxiety, 50 and 39. All these differences were significant at the 0.1% level. Logistic regression including these variables and gender gave a model which predicted group membership with a probability of 0.77. The authors suggest that patients with OLP might be given supportive psychological treatment in respect of stress.

doi:10.1038/sj.bdj.4810981

TOOTH WEAR; MEDICATION

Asthma and tooth erosion. Is there an association?

Dugmore CR, Rock WP Int J Paediatr Dent 2003; 13: 417-424

In a longitudinal study, no association was found.

There appears to have been a true increase in asthma in the UK, and some non-blind studies have suggested greater dental erosion in these patients, possibly related to medication. In Leicestershire and Rutland, every 5th 12-year-old child at state schools was selected as a random sample of 1753, who were examined for dental erosion, and 2 years later, 1308 were re-examined. Asthma status and inhalation medication was recorded separately on a questionnaire.

At age 12 yrs, 15% reported asthma, 76% reported no asthma, and 9% gave no answer. At age 14 yrs, respective percentages were 16, 76 and 8. At age 12, 54% of asthmatics showed erosion and 2.8%, dentine erosion, compared with 57% and 2.3% in the non-asthmatic controls; at age 14, respective scores were 65% and 8.5%, and 65% and 8.9%. The authors discuss previous findings and conclude there is no association of erosion with asthma.

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ONCOLOGY

Multiple primary tumours following head and neck cancer in southern England during 1961-98

Warnakulasuriya KAAS, Robinson D et al. J Oral Pathol Med 2003; 32: 443-449

In tobacco-associated sites, there was a significant risk of further primary tumours.

In western countries, as many as 20% of patients with head and neck tumours may develop second primaries. This study examined data from a database on cancer relating to 14 million people in south-east England. Over the observation period, 38,970 head and neck tumours were reported in men, and 20,988 in women. Over a mean follow-up time of 3.4 years, 2138 men developed 1 to 4 further primary tumours at any body site, and over a mean 3.1 years, 752 women developed 1 to 3.

For 'tobacco sites' — tongue, salivary glands, mouth, oropharynx, nasopharynx, oesophagus, larynx, lung, bronchus and bladder — the standardized incidence ratio of second primary tumours was 1.14, significantly higher than expected. For all other sites, it was significantly lower at 0.87. However, there was no excess risk for myeloid leukaemia, indicating little effect of radiotherapy in comparison with smoking. The authors discuss these and other factors which might explain the results.

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ORAL PHYSIOLOGY; TOOTH LOSS

Chewing ability of subjects with shortened dental arches

Sarita PTN, Witter DJ et al. Community Dent Oral Epidemiol 2003; 31: 328-334

Chewing comfort and ability is related to the number of occluding pairs of posterior teeth and arch symmetry.

Around 10% of patients with a shortened dental arch (SDA: reduction in numbers of molars and/or premolars) have reported difficulties with chewing. However, modern food preparation methods suggest chewing is not so important.

In this study, 725 SDA subjects and 125 with complete dental arches, from rural and urban areas of Tanzania, were categorized according to arch characteristics and interviewed about ease of chewing 12 soft and 8 hard Tanzanian foodstuffs.

About 12% of 381 subjects with 5-10 pairs of occluding posterior teeth and symmetrical arches had complaints. Subjects with 0-4 occluding pairs or asymmetric arches (n = 469) were much more likely to report problems (about 70%).

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