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

ORAL ONCOLOGY; HISTOPATHOLOGY

The high prognostic value of the histologic grade at the deep invasive front of tongue squamous cell carcinoma

Kurokawa H, Zhang M *et al J Oral Pathol Med* 2005; **34**: 329–333

A high score for the histological invasive front grade (IFG) may indicate lymph node metastasis.

Where squamous cell carcinoma invades the underlying tissues, these cells may have molecular characteristics differing from more superficial cells in the tumour. These researchers reviewed records of 147 patients treated for carcinoma of the tongue over a 15 year period, and excluded 23 where the treatment was palliative only. The remaining 124 patients (79 male) had a mean age of 58.5 yrs.

Specimens were retrieved from original paraffin blocks (this is one of many studies which suggest that patients should not be able to prevent use of body material removed in treatment and that retention of such material should be normal practice), and assessed for overall and IFG grades of malignancy. These were correlated ($R = 0.77$).

Disease-free survival (DFS) at 5 yrs was 67%. Forty patients died from uncontrolled primary tumour, 13 with lymph node metastases, and 2 with distant metastases. Factors associated with prognosis included T score, size, stage, depth, appearance, nodal metastasis, microvascular invasion and IFG. For patients with IFG < 8 points, 5 year DFS was 95%, for higher IFG, it was 54%, and an IFG of 11+ correlated with lymph node metastasis.

doi:10.1038/sj.bdj.4812678

IMPLANT DENTISTRY; PROSTHODONTICS

Microbiological and clinical outcomes and patient satisfaction for two treatment options in the edentulous lower jaw after 10 years of function

Quirynen M, Alsaadi G *et al Clin Oral Impl Res* 2005; **16**: 277–287

There were no significant differences between implant-supported overdentures (OD) and fixed full prostheses (FFP).

This study compared 2 groups of fully edentulous patients treated at least 10 years earlier, 25 with ODs and 12 with FFPs, all based on Brånemark implants. In the OD group, 3 subgroups were included: magnet, bar and ball attachments. Clinically, there was no significant difference at 10 years between subgroups or groups in plaque, bleeding, attachment level (OD: 0.9 mm; FFP: 1.2 mm) and bone loss (0.86 mm; 0.73 mm). Similar microbial floras were present in both groups, with the composition relating to probing depth and bleeding.

Patients expressed similar degrees of satisfaction for both types of prosthesis, and there were no differences between OD and FFP groups in satisfaction with the upper prosthesis

doi:10.1038/sj.bdj.4812679

TRAUMA; BEHAVIOURAL SCIENCE

Prevalence of post-traumatic stress disorder symptoms on orofacial pain patients

de Leeuw R, Bertoli E *et al Oral Surg* 2005; **99**: 558–568

Post-traumatic stress disorder (PTSD) may occur in 1/6 of patients with chronic orofacial pain, and has relevance to temporomandibular disorders.

Over a 5 year period, 1,478 patients were seen in a Kentucky orofacial pain clinic and diagnosed with masticatory /cervical muscle pain or TMJ pain. PTSD is diagnosed according to DSM-IV in relation to significant life-threatening traumatic exposures which are identified as stressors. On the basis of psychometric questionnaires, a PTSD-positive group (P+) of 218 was identified, and also a PTSD-negative group (P-) of 551 patients, with a stressor but without the disorder. The remaining 709 patients had no stressors (S-).

There were significant differences between the 3 groups ($P < 0.01$) on 8 of 12 scales of the Multidimensional Pain Inventory. In relation to primary oral diagnoses, 76% of P+ subjects had muscle pain, and 24% had TMJ pain; respective percentages for P- were 66 and 34, and for S-, 61 and 39 ($P < 0.001$). More dysfunctional, and fewer adaptive coping and anomalous, profiles occurred in the P+ group than in P- and S- groups. Psychological distress was higher in all respects in the P+ group. The authors conclude that P- patients with TMJ disorders show low levels of distress, and that such distress is a likely indicator of PTSD.

doi:10.1038/sj.bdj.4812680

ORTHODONTICS; BEHAVIOURAL SCIENCE

Does orthodontic treatment affect patients' and parents' anxiety levels?

Sari Z, Uysal T *et al Eur J Orthod* 2005; **27**: 155–159

Initial raised anxiety levels were reduced after a year of treatment in patients, but not in their parents.

Studies have suggested difficulty in psychological adjustment to orthodontic treatment. This study examined 2 groups of randomly selected orthodontic patients and parents in a Turkish clinic. Group A, awaiting treatment, included 40 individuals (>14 yrs; 23 female) and one parent of each (28 female). Group B included 43 (> 14 yrs; 19 female) who had received non-extraction treatment for 1 yr, and one parent of each (24 female). There is evidence that by 14 yrs of age, stable psychological characteristics are present.

No difference was found between groups in age, gender and educational attainment. State anxiety was significantly higher in A (58.6) than B (43.3), but there was no difference in trait anxiety (45.3 and 43.9). Parents of A and B had similar state (39.9 and 42.8) and trait (51.1 and 50.4) scores. The authors consider the difference in the children to reflect a normal reduction in anxiety during treatment, but suggest that parents may benefit from some attention to reduce their anxiety.

doi:10.1038/sj.bdj.4812681