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### BEHAVIOURAL SCIENCE; DENTAL PATHOLOGY

# Impact of tooth wear on daily living

Al-Omiri MK, Lamey P-J et al. Int J Prosthodont 2006; 19: 601-605

Tooth wear had an adverse effect on several aspects of patient satisfaction.

Tooth wear (TW) may be physiological or pathological but is irreversible. In some patients it can affect quality of life. In this study, 76 patients aged 18-50 yrs (mean 35) with TW were compared with matched controls. Subjects completed the Dental Impact on Daily Living (DIDL) questionnaire. Two subjects had mild TW, 42 moderate, and 32 severe.

In the TW group, 36% were dissatisfied with their teeth, 54% relatively satisfied, and 13% totally satisfied. Respective control proportions were 4%, 25% and 71%. Satisfaction was significantly higher in the control group for each of the 5 DIDL dimensions of appearance, pain, oral comfort, performance and eating restriction. Severity of TW was significantly correlated with education level and total satisfaction scores.

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### SPECIAL CARE DENTISTRY; LEARNING DISABILITIES

Children with Down syndrome: oral development and morphology after use of palatal plates between 6 and 48 months of age

Bäckman B, Grevér-Sjölander A-C et al. Int J Paediatr Dent 2007; 17: 19-28

There were several positive effects of palatal plates, but their use requires extra attention by both children and carers.

Palatal plates (PP) have shown apparent beneficial effects for Down syndrome (DS) children in longitudinal studies, but speech and language therapy (SLT) intervention is also required. This study compared 36 DS children who had received PP from 18 to 48 months of age and SLT, 31 age matched DS children who had received only SLT, and 36 age-matched normal control children (NC). The mean age at examination was 50 months.

In the NC group, one child had 2 unerupted teeth, in DS with only SLT, 10 had 16 such teeth, and in DS with PP and SLT, 6 had 9 such teeth. The difference between NC and DS with SLT was significant (P = 0.01). Both DS groups had more Angle class III malocclusion than NC. Posterior lateral cross-bite was commoner in DS with only SLT than the other groups, and there were other occlusion differences. In most of the DS with SLT and PP group there was a higher level of facial coordination than in the DS with only SLT.

The authors comment that PP therapy has useful effects on development of DS children.

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### ENDODONTICS; ADVERSE TREATMENT EFFECTS

Safety of electronic apex locators and pulp testers in patients with implanted cardiac pacemakers or cardioverter/defibrillators

Wilson BL, Broberg C et al. J Endod 2006; 32: 847-852

The diagnostic devices did not appear to interfere with cardiac devices.

Implanted cardiac devices may malfunction if electrical interference occurs. Pulp testers (PTs) and apex locators (ALs) are possible sources of such interference, but no effect has been reported in patients so far. In this study, after uneventful exposure of 5 cardiac device patients to PT and AL, a further 22 patients were examined with cardiology back-up available. Those who were pacemaker-dependent (intrinsic heart rate <40 beats/min) were excluded. Patients were monitored by electrocardiography (ECG) and through their cardiac devices.

During monitoring, no adverse events were detected. Taking into account all data collected, including decreased respiratory rate during PT and AL activity in the mouth, no effects could be attributed to the dental devices. The authors conclude that PTs and ALs are safe to use in such patients.

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## ORAL PATHOLOGY; ORAL SURGERY

Adenoid cystic carcinoma and mucoepidermoid carcinoma of the maxillary sinus: report of a 44-year experience of 25 cases from a single institution

Perez DE da C, Pires FR et al. J Oral Maxillofac Surg 2006; 64: 1592-1597

Prognosis depended on clinical stage and histological type, but was poor for adenoid cystic carcinoma (ACC).

ACC and mucoepidermoid carcinoma (MEC) are rare tumours in the maxillary sinus. This paper analyses 18 ACCs and 7 MECs diagnosed from 1953 to 1997 in a Brazilian hospital. Tumours were included only if their origin in the antral lining was fully established.

All of the ACCs presented as a mass, 14 with pain, and 16 were staged clinically as III or IV, and 16 histopathologically as T3 or T4. All the MECs presented as a mass, 4 with pain, 3 were staged III or IV, and 3 as T3 or T4. Treatment was mainly surgical for 14 tumours and non-surgical or supportive for the others. From ACC, 16 patients died after a mean follow-up of 4.6 yrs, and 3 patients with MEC were alive after a mean 4.8 yrs without clinical evidence of disease. Overall ACC survival was 40% at 5 yrs and 0% at 10, while MEC survival was 70% at both intervals.

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