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

FACIAL TRAUMA

Incidence of dental trauma associated with facial trauma in Brazil: a 1-year evaluation

da Silva AC, Passeri LA *et al.* *Dent Traumatol* 2004; **20**: 6-11

Over 1/6 of facial trauma recipients also sustained dental trauma.

When the face is injured, any dental trauma is dependent on the direction and force of impact, and the protection afforded by overlying tissues. Over a 1 yr period, 340 patients with facial trauma (4/5 men; 70% aged 11-40) attended a Brazilian hospital. Of these, 52 had also sustained dental trauma.

Facial trauma had been caused mainly by falls (37%), traffic accidents (26%), assaults (19%) and work accidents (8%); these were also the main causes of dental injury (52%, 25%, 10% and 10%). Over 70% of dental trauma occurred in the first 2 decades of life, but facial trauma was common up to age 50. Over 2/3 of dental trauma was at weekends, but less than half of facial trauma.

The authors note that half the falls were in bicycle accidents; in these, and in 1/3 of traffic accidents, no protective helmet or seatbelt was worn. There were also more tooth luxation and avulsion injuries in this study than some others, possibly because only subjects with other facial injuries (and perhaps greater trauma force) were considered.

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CARIOLOGY; BEHAVIOURAL DISORDERS

Is attention-deficit hyperactivity disorder a risk factor for dental caries? A case-control study

Broadbent JM, Ayers KMS *et al.* *Caries Res* 2004; **38**: 29-33

A high DMFT score was much more likely in subjects with attention-deficit hyperactivity disorder (ADHD).

ADHD might be a risk factor for caries because of medication, altered health behaviour or cariogenic parental rewards. Children aged 11-13 yrs with a DMFT of 5 or more were identified in a group of 4215 in the New Zealand School Dental Service database. This group of 273 was matched with a control group of subjects who had DMFT of 4 or less. Questionnaires were sent to all parents, and after follow-up, were returned from 47% of case-control pairs. There were twice as many females as males in this sample.

In both groups, demographic data were similar. In the case group, there was greater experience of dental pain and GA for restorations. ADHD was present in 11 case and 3 control subjects, of whom respectively 8 and 1 received medication for it. Logistic regression identified no other factors related to high caries rates. The authors recommend improved caries preventive measures in these patients.

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PROSTHODONTICS

A randomised prospective clinical trial on the effectiveness of three treatment modalities for patients with lower denture problems. A 10 year follow-up study on patient satisfaction.

Raghoebar GM, Meijer HJA *et al.* *Int J Oral Maxillofac Surg* 2003; **32**: 498-503

Implant-retained overdentures (IRO) gave patients greater satisfaction than other treatments.

In this study, 90 edentulous patients with mandibular symphysis height of 15-25 mm and persistent lower denture problems were randomised to 3 treatments: IRO; preprosthetic surgery to enlarge the denture-bearing area prior to construction of a new denture (PPS); and a new conventional complete denture (CD: control group). All patients received a new maxillary denture. After 1 yr, CD and PPS patients had the option of an IRO, and 14 PPS and 6 CD patients did this in the 10 yr period.

Implant survival rate at 10 yrs was 93%. At 1 yr, IRO was the best technique in respect of lower denture complaints, chewing problems and satisfaction, and PPS had some advantages over CD. At 5 yrs, IRO patients had fewer complaints than CD, but no other differences were present. At 10 yrs, there was no difference between techniques. The authors attribute changes in satisfaction to the transfer of some patients to an IRO.

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MAXILLOFACIAL SURGERY

Adenoid cystic carcinoma of the head and neck – a 20 years experience

Kokemueller H, Eckardt A *et al.* *Int J Oral Maxillofac Surg* 2004; **33**: 25-31

Local recurrence was the main limit to survival, and occurred most frequently within 5 yrs.

Adenoid cystic carcinoma is rare, progressing mainly with perineural invasion. Treatment is by surgical resection, and the role of adjunctive treatments is controversial. This study examined records from 74 patients (mean age 58 yrs, range 15-82; 38 men) seen over a 20 yr period in a German hospital.

Mean overall survival was 11.2 yrs; rates were 71%, 54% and 37% at 5, 10 and 15 yrs. Respective recurrence-free results were 9.1 yrs and 57%, 45% and 37%. Disease progressed in 42 cases and 36 patients died from tumours. Respective survival data after diagnosis of progression were 4.7 yrs and 35%, 15% and 0%.

There were no significant differences between local control rates of patients treated with and without postoperative radiation. The authors recommend multicentre randomised studies to determine the role of adjunctive treatments.

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