

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

MAXILLOFACIAL SURGERY

Parotid neoplasms in children: experience of diagnosis and management in a district general hospital

Ethunandan M, Ethunandan D *et al.* *Int J Oral Maxillofac Surg* 2003; **32**: 373-377

Twelve of these rare tumours were identified, and most complications of treatment were minor.

Most published data on salivary gland tumours in children are from specialized centres, and this paper describes the experience of a general hospital in Sussex. Records were examined for all parotidectomies from 1974 to 1999. There were 545 parotidectomies for neoplastic conditions in 536 patients, with 569 diagnosed neoplasms. Twelve of these were in subjects aged up to 18 yrs.

There were 8 pleomorphic adenomata, and one spindle cell myofibroblastic nodule which had originally been diagnosed as a benign neural sheath tumour. Three malignant tumours were all low-grade mucoepidermoid carcinomata. Clinical examination had shown no signs suggestive of malignancy in any patient. All patients were treated with parotidectomy, and half developed facial nerve weakness; this lasted no longer than 6 months except in one case where a portion of the nerve had been intentionally removed.

All carcinomata were given postoperative radiotherapy. Recurrent disease occurred only in one 6 yr-old patient with invasive carcinoma and positive margins. Frey's syndrome developed only in one patient. Follow-up was for a median 4.5 years, with no evidence of disease at the last visit in any patient.

doi:10.1038/sj.bdj.4810874

DENTAL ANATOMY; ORTHODONTICS

Tooth size in dentitions with buccal canine ectopia

Chaushu S, Sharabi S *et al.* *Eur J Orthod* 2003; **25**: 485-491

There appear to be gender differences in tooth size in these patients.

Crowding is found more frequently with buccally (BDC) than with palatally (PDC) displaced canine teeth. In some studies, PDC has been associated with smaller tooth size. In 3 Israeli orthodontic practices, 41 consecutive subjects with BDC and 58 with PDC were compared with 40 matched normal controls.

In female subjects with BDC, teeth were larger than in controls; in males they were normal. BDC tooth size was larger than PDC; in BDC females this was due to larger maxillary incisors and first molars, but in PDC males, to smaller teeth. Bilaterally-affected BDC females tended to have larger lateral incisors than unilaterally-affected females. The authors note the gender differences, and suggest that males and females should be considered separately in such studies.

doi:10.1038/sj.bdj.4810875

ORAL SURGERY; PLASTIC SURGERY

Long-term effect of pharyngeal flap surgery on craniofacial and nasopharyngeal morphology in patients with cleft palate

Heliövaara A, Haapanen M-L *et al.* *Acta Odont Scand* 2003; **61**: 159-163

There were differences in airway dimension 10-20 years later, but apparently without airway obstruction.

In 48 consecutive patients who had received pharyngeal flap surgery for isolated cleft palate, a comparison was made some 10-20 years later between 12 who had received velopharyngeal flaps (VPF+ group) and the remainder who had not (VPF-). Subsequent orthodontic treatment was given to 90% of patients, but none had orthognathic surgery.

Standardized cephalograms showed that VPF+ patients had significantly greater mean nasopharyngeal airway dimensions at the upper level of the nasopharynx (24.8 mm v. 21.7 mm for VPF-), and significantly lower mean oropharyngeal dimensions at the lower level of the oropharynx (VPF+: 11.6; VPF-: 14.9). Surgery in the VPF+ group produced velopharyngeal competence in 7 subjects. No long-term symptoms of sleep apnoea or snoring were found in any patients. There were no significant differences in craniofacial dimensions.

doi:10.1038/sj.bdj.4810876

RADIOTHERAPY; ORAL SURGERY

Dental extractions in the irradiated head and neck patient; a retrospective analysis of Memorial Sloan-Kettering Cancer Center protocols, criteria and end results

Sulaiman F, Huryn JM *et al.* *J Oral Maxillofac Surg* 2003; **61**: 1123-1131

A conservative approach to dental extraction was accompanied by minimal osteoradionecrosis.

This study reviewed the treatment of 1194 irradiated head and neck tumour patients who had been evaluated and treated in the dental service of this large New York hospital. Most tumours were in the larynx, base of tongue, nasopharynx, parotid, oral tongue, floor of mouth and maxillary sinus. Three quarters were squamous cell carcinomata (SCC).

Dental extractions (two-thirds in posterior teeth) had been required in 187 patients aged 6 to 89 yrs. In about 10% of cases, antibiotics were given. Hyperbaric oxygen therapy (HBO) was given to 7 patients. Only 4 teeth were extracted during radiotherapy, but 300 were removed before, and 647 afterwards. More teeth were in the radiation field (528) than outside it (423).

Osteoradionecrosis developed in 4 patients who did not receive HBO. All 4 had SCC of the tongue or floor of the mouth. The authors discuss their protocols and procedures and advise conservative management of dental conditions in these patients.

doi:10.1038/sj.bdj.4810877