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ORAL MEDICINE

The efficacy of pilocarpine and bethanechol upon saliva production in cancer patients with hyposalivation following radiation therapy

Gorsky M, Epstein JB *et al.* *Oral Surg* 2004; **97**: 190-195

No objective improvement occurred, but patients reported subjective improvement with both drugs.

Xerostomia is a frequent result of salivary gland irradiation, and is of significance in regard to several oral sequelae, including caries. In this study, 2 drugs were compared in respect of salivary stimulation in 42 patients who had received irradiation following squamous cell carcinomata, salivary gland tumours, or lymphomata. Pilocarpine (P) alone was given to 5 patients, bethanechol (B) alone to 10, and both drugs in a crossover trial to 27 others. The mean pre-study duration of dry mouth was 10 months.

After a 2-3 wk course of each drug, resting and stimulated saliva quantities were not significantly greater, nor was there any significant difference between the effects of P and B. There were moderate adverse effects which did not differ between P and B. Patients reported significant improvement in oral comfort and taste after B but not P, and improved swallowing after B but not P. Mouth wetting was reported as improved with both drugs. The authors suggest that the relatively small individual differences in salivary production contributed to improved quality of life, and recommend longer trials.

doi:10.1038/sj.bdj.4811523

ORAL PATHOLOGY; COSMETIC IMPLANTS

Orofacial granulomas after injection of cosmetic fillers. Histopathologic and clinical study of 11 cases

Lombardi T, Samson J *et al.* *J Oral Pathol Med* 2004; **33**: 115-120

Cosmetic injections led to varying histological appearances.

Numerous substances (some resorbable in 4-6 months, some biodegradable and inducing new collagen, and others which are permanent implants) have been prepared for removing or reducing facial skin wrinkles. This paper lists 11 cases of granulomata following such injections in women of mean age 55 yrs.

Nodules presented in cheek, glabella, upper lip, lower lip, nasolabial groove and lower eyelid in different patients, varying in clinical appearance from salivary cyst to basal cell carcinoma. Biopsy revealed 2 main types of lesion: one was described as a classic foreign body granuloma, and the other as a cystic and macrophage type.

In 5 cases, pain or discomfort was a presenting symptom. In 8 cases, the presentation was known to have occurred between 6 months and 6 yrs after the injection. Legal action had been taken against the responsible practitioner by at least one patient. The

authors comment on the bizarre histological appearance of some lesions.

doi:10.1038/sj.bdj.4811524

ORAL SURGERY

A prospective study on transplantation of third molars with complete root formation

Mejäre B, Wannfors K *et al.* *Oral Surg* 2004; **97**: 231-238

Over a 4 year period, 4/5 transplants survived.

A lost 1st or 2nd molar may sometimes be replaced by transplanting a suitable 3rd molar into the space. The main complications are inflammatory root resorption arising from pulp infection, or resorption/ankylosis in response to damage of the root surface during the procedure. This study assessed 50 consecutive patients (mean age 37 yrs) in whom autotransplantation was performed after loss of a molar. Four surgeons did the transplants and the teeth were subsequently root treated by 2 endodontists.

Teeth were followed with regular radiographs for up to 10 yrs. By 4 yrs, 28 teeth remained in the study, and 7 transplants had been lost: root resorption accounted for 3 and periodontal pathosis for 4. Other minor complications occurred which were resolved without loss of the tooth. The authors compare their results with implant restorations in the molar regions and consider that survival rates are similar, but costs for autotransplantation are less.

doi:10.1038/sj.bdj.4811525

ONCOLOGY

Postoperative irradiation with or without concomitant chemotherapy for locally advanced head and neck cancer

Bernier J, Dommene C *et al.* *N Engl J Med* 2004; **350**: 1945-1952

The combined regime appeared to have a better survival rate.

This was a large European comparison of radiotherapy alone (R), and radiotherapy combined with cisplatin chemotherapy (RC), after surgery aimed at resection of stage III or IV tumours. Tumours in the mouth, pharynx and larynx were included. In each of the 2 groups, 167 patients were randomised to the regime, with a median follow-up of 5 yrs.

Mucosal reactions were similar in the 2 groups; muscular fibrosis was greater in RC; xerostomia was greater in R. Quality of life was not assessed. After 5 yrs, progression had occurred in 103 of R and 91 of RC patients. Respective progression-free survival was estimated at 36% and 47%, and overall survival as 40% and 53%.

An American multi-centre study on the same topic in the same journal issue agrees there is better survival with the combined therapy, but also concludes there is a substantial increase in adverse effects. An editorial notes the improved survival in both studies, and states that the intensity of treatment is limited ultimately by the patient's ability to tolerate it.

doi:10.1038/sj.bdj.4811526