

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

## PERIODONTICS; GASTROENTEROLOGY; HAEMATOLOGY

### The relationship between gastric-oral *Helicobacter pylori* and oral hygiene in patients with vitamin B<sub>12</sub>-deficiency anemia

Avcu N, Avcu F et al. *Oral Surg* 2001; **92**: 166-169

Patients with good oral hygiene (OH) had less gastric recurrence of *H pylori* after treatment, and eradication of the organism increased serum vitamin B<sub>12</sub>.

Dental plaque may harbour *H pylori*, and gastric infection with this organism may impair vitamin B<sub>12</sub> absorption. In this Turkish study (*H pylori* infection is very common there), 108 vitamin B<sub>12</sub> deficiency anaemia patients with *H pylori* positive gastritis were treated with clarithromycin, omeprazole and amoxicillin for 2 weeks.

After gastric eradication of *H pylori*, serum vitamin B<sub>12</sub>, erythrocyte count and haemoglobin were all significantly increased and MCV reduced. In 21 patients with good oral hygiene status, 29% had *H pylori* in plaque, and 5% experienced gastric recolonization. For 51 with fair OH and 36 with poor OH, respective scores were 90% and 41%, and 100% and 58%. The authors suggest that control of *H pylori* in dental plaque may help reduce gastric recurrence of the organism.

## ORAL SURGERY

### The use of enucleation and liquid nitrogen cryotherapy in the management of odontogenic keratocysts

Schmidt BL, Pogrel MA *J Oral Maxillofac Surg* 2001; **59**: 720-725

The use of cryotherapy may have definite advantages in treatment of this condition which is likely to recur after enucleation only.

This was a retrospective review of 26 patients, mean age 42 yrs (range 8-76), who received keratocyst enucleation followed by 2 liquid N<sub>2</sub> applications to the cavity for 1 min, 5 min apart. Previously, 22 lesions had recurred after enucleation alone; also, 22 lesions were in the posterior mandible, and 3 patients had nevoid basal cell carcinoma with multiple lesions. In 11 patients, lesions larger than 3-4 cm or without cancellous bone remaining after enucleation were grafted simultaneously from the iliac crest.

Wound dehiscence occurred in 4 subjects, and pathological fracture in one who did not have a bone graft. In 3 patients, the lesion recurred in 1.2-1.9 yrs; all had previously had keratocysts removed. After a repeat of the present treatment protocol, there was no recurrence within 3-4 yrs (the time of writing). Other cases

were followed for 2-10 yrs without recurrence. A following discussion by a British oral surgeon is enthusiastic.

## CARIOLOGY; MEDICINE

### Is asthma a risk factor for dental caries? Findings from a cohort study

Meldrum AM, Thomson WM et al. *Caries Res* 2001; **35**: 235-239

This longitudinal study suggests no such link.

Previous studies of this hypothesized link have produced equivocal results, perhaps because both conditions are multifactorial, and there is difficulty in defining asthma. The present study examined the caries increment between ages 15 and 18 yrs in a New Zealand cohort study of 781 subjects.

In long term asthma ( $n = 9$ ; asthma at ages 5, 9, 11, 13 and 15 yrs), DFS increment was 3.0; in 'wheeze-determined' asthma ( $n = 56$ ) and 'medication-determined' asthma ( $n = 39$ ) at 9, 11, 13, 15 yrs and including the long term group, respective DFS increments were 2.39 and 2.33; in those common to both these groups ( $n = 36$ ), it was 2.61; in those with definitely no history of asthma ( $n = 206$ ), it was 2.13; and in the whole 781, it was 2.06. No significant differences were found between any groups.

## ORAL MEDICINE; IMMUNOLOGY

### Oral administration of milk from cows immunized with human intestinal bacteria leads to significant improvements of symptoms and signs in patients with oral submucous fibrosis

Tai YS, Liu BY et al. *J Oral Pathol Med* 2001; **30**: 618-625

Following 3 months' milk treatment, oral submucous fibrosis (OSF) and other lesions regressed significantly.

Upregulation of fibrogenic cytokines and downregulation of antifibrotic cytokines are involved in the pathogenesis of OSF. This study compared 26 Taiwan Chinese patients treated with immune milk (previously shown to have a variety of systemic effects) and encouragement to quit harmful oral habits (betel chewing, tobacco smoking, alcohol drinking) with 20 given the latter treatment only.

In the immune milk group only, significant improvements were noted in spice tolerance, xerostomia, extent of leucoplakia/erythroplakia, and mouth opening of those with the most restricted ability. Non-significant trends occurred in other signs and symptoms. The authors consider their findings to be a basis for further investigation by double-blind RCTs.