ABSTRACTS

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

CARIOLOGY; EPIDEMIOLOGY

Caries incidence and lesion progression from adolescence to young adulthood: a prospective 15-year cohort study in Sweden

Mejàre I, Stenlund H *et al.* *Caries Res* 2004; **38:** 130-141

A strategy of limiting operative treatment may have helped to prevent some caries.

Patients under 20 yrs of age are offered free dental care in Sweden. This study began with a cohort of 536 children 11–13 yrs old, born in 1972–3 in a Stockholm suburb, who were followed up to age 21–22 yrs, when 364 remained, and 250 agreed to a further examination at age 26-27 yrs.

From 12 to 26–27 yrs, mean proximal DFS increased from 0.5 to 5.0, and occlusal DFS from 3.0 to 5.1. Overall caries incidence in enamel was 4 new lesions/100 surface-years (NL/100), and decreased over the period. Incidence of progression from enamel to dentine was 4.7 NL/100 and also decreased.

The authors conclude that new caries incidence and the rate of lesion progression decreased from adolescence to young adulthood, and a restricted approach to proximal restorations may have benefited the subjects, as few such restorations were present and very few lesions extended into the inner half of the dentine.

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ONCOLOGY; EPIDEMIOLOGY

Risk of oral squamous cell carcinoma in 402 patients with oral lichen planus: a follow-up study in an Italian population

Gandolfo S, Richiardi L *et al.* *Oral Oncol* 2004; **40:** 77-83

Risk of squamous cell carcinoma (SCC) was greater in patients with oral lichen planus (OLP) than in the general population of the area.

A recent review concluded that there is not enough evidence to conclude that lichen planus is a premalignant lesion. In this study, 402 patients (27% smokers) with OLP diagnosed by Krutchkoff's criteria in the main Turin hospital from 1988 to mid-1999 were seen about once per yr until early 2001, death, or diagnosis of oral SCC. Latency of 6 months from OLP diagnosis was allowed before counting an SCC diagnosis.

Comparison with the local cancer registry's oral statistics gave an expected 0.2 tumour cases in the sample, but 9 were found ($P < 0.05$ in both men [2] and women [7]), including a verrucous carcinoma. Non-smokers accounted for 5 cases, including this one. When latency of 2 yrs was applied, the proportion developing OLP decreased from 0.0223 to 0.0113 (355 subjects, 4 tumours v. 0.15 expected). The authors discuss possible confounders, including lesions which might have been already dysplastic, diagnostic variation, synchronous OLP and SCC, *Candida,* HCV infection and the role of smoking.

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ONCOLOGY; EPIDEMIOLOGY

Cancer and oral lichen planus in a Swedish population

Rödström P-O, Jontell M *et al.* *Oral Oncol* 2004; **40:** 131-138

Oral squamous cell carcinoma (SCC) incidence appeared higher in oral lichen planus (OLP) patients than in the general population.

Controversy over whether OLP may lead to SCC focuses on inadequate documentation and failure to detect dysplasia. The relationship of OLP malignant change to SCC mortality is also important in deciding OLP follow-up. This study covered 1028 patients with OLP followed at Gothenburg over a 0.25-16 yr period (mean 6.8). Development of SCC was compared to national statistics.

The expected incidence of SCC was 0.25 cases, but 5 were found ($P < 0.001$), one of which was in a different oral site from the OLP. Other malignancies developing in the population (55 in 44 patients) did not differ from expected national incidence rates. The authors discuss potential confounders including diagnosis, latency period, and smoking and alcohol intake (neither ascertained in this study). They conclude that there is no strong evidence justifying continuous specialist recall for OLP patients, and that despite the higher oral SCC risk found in their study, observed survival is similar in OLP patients and the general population.

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IMPLANT DENTISTRY

Clinical outcome of 103 consecutive zygomatic implants: a 6–48 months follow-up study

Malevez C, Abarca M *et al.* *Clin Oral Impl Res* 1004; **15:** 18-22

In patients with severely resorbed maxillae, implants in the zygoma were a useful alternative.

Extreme maxillary atrophy presents difficulties for implant placement; these are sometimes solved with various bone grafting or augmentation techniques, from which there is sometimes significant morbidity. Zygomatic implantation is sometimes a possible alternative, and 55 patients in this study were provided with 103 such fixtures under GA along with 194 standard implants in the anterior maxilla.

Following fixed prosthesis placement, 16 standard implants were lost in 7 patients, leading to removable prostheses in 3 cases. No zygomatic implants were lost. There were minor problems after surgery (1 event) and prosthesis placement (8), including 5 cases of sinusitis which appeared unconnected to the zygomatic implants. The authors note that application of the usual success criteria is not possible for these implants, and report survival rates. For instance, 34 such implants were followed up for more than 2 yrs without loss.

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