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OCCUPATIONAL HEALTH

Finger osteoarthritis and differences in dental work tasks

Solovieva S, Vehmas T *et al.* *J Dent Res* 2006; **85**: 344-348

In this group of dentists, those with limited variety in their work had more osteoarthritis (OA) in their fingers.

OA is the commonest joint disorder leading to pain and disability, and repetitive use of hand joints increases the condition. In dentists, the thumb, index and middle fingers are heavily used for precise gripping. A questionnaire was sent to 436 female dentists in the Helsinki area, and 291 answered it. They included 24 periodontists, 25 orthodontists, 6 prosthodontists and 5 surgical specialists.

In the previous year, GDPs spent 13.8 hrs on restorative and endodontic treatment, 1.3 hrs on orthodontics, 3.6 hrs-wk on periodontics, 1.6 hrs on prosthodontics and 1.4 hrs on surgical treatment. Respective hours for specialists were all significantly different at 3.7, 10.5, 5.4, 2.2 and 1.3. Total working hrs were 29 for GDPs and 32 for specialists, with 2.9 and 7.7 respectively for administration. From these data, 3 clusters of dentists' work practice were identified: high variation (n = 96 dentists), moderate variation (64) and low variation (131). The risk of OA in thumb, index and middle fingers was twice as high in the first as in the last cluster, and higher in the 2nd and 3rd clusters separately in right and left hands than in the first cluster.

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ORAL SURGERY

Clinical factors affecting the outcome of occlusal splint therapy of temporomandibular joint disorders

Emshoff R *J Oral Rehabil* 2005; **33**: 393-401

At presentation, patients who had experienced pain longer were less likely to have a successful treatment outcome.

This study included 76 consecutive patients with unilateral TMJ pain referred to an Innsbruck clinic. Internal joint derangement type I was diagnosed in 16, (disc displacement with normal closing), type III in 19 (disc displacement without reduction), degenerative joint disease in 12 and no TMJ condition in 29. Patients received acrylic splints with flat occlusal surfaces.

After 6 months, pain was significantly reduced in 10 of the first group, and clicking in 9; and respectively in 9 and 19 of the 2nd group, 6 and 12 of the 3rd, and 20 of the 4th, in which no one experienced clicking. Where pain duration was 6 months or less, the OR for successful treatment was 15, and where it was over 2 yrs, the OR for unsuccessful treatment was 6. The author concludes that presence of definite TMJ disorder is not linked to pain outcome with occlusal splint therapy, and that short pain duration prior to treatment predicts successful treatment outcome.

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ORAL SURGERY; PLASTIC SURGERY

Morbidity at the iliac crest donor site following bone grafting of the cleft alveolus

Swan MC, Goodacre TEE. *Br J Oral Maxillofac Surg* 2006; **44**: 129-133

There were minimal complications with this procedure in a group of 72 patients.

The optimal donor site for cleft alveolus bone grafting is debatable. Using ribs may lead to pleural tears, and using the tibia may lead to postoperative fracture. This study retrospectively investigated 11 yrs of iliac crest grafting in a total of 73 patients at a UK hospital. Questionnaires were returned for 72 patients after two follow-up contacts.

Unilateral clefts were present in 57, bilateral in 15 and one was midline. Mean age at operation was 10 yrs (range 7-14); this was determined by eruption of central incisors and prior to eruption of permanent canines.

In 5 patients there was postoperative ache at the donor site, resolving within 6 months; there were 2 superficial wound infections treated with oral antibiotics. In one case each, the scar was persistently numb, hyperaesthetic or hypertrophic. There were no other complications, and the authors consider the procedure satisfactory.

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ONCOLOGY

Metastatic tumours to the jaws and oral soft tissues: a retrospective analysis of 41 Korean patients

Lim S-Y, Kim S-A *et al.* *Int J Oral Maxillofac Surg* 2006; **35**: 412-415

In these patients, the commonest primary site was the liver.

About 1% of oral tumours are metastases. Most are in the mandible, and in Western countries originate mainly in the breast, followed by lung, kidney, thyroid, intestine, prostate, stomach, testis and bladder. Survival is usually <1yr, with approximately 10% surviving 4 yrs. In this study, 48 cases of oral metastasis were identified from published literature over 22 yrs, with adequate data in 41 cases.

Eleven cases arose from hepatocellular carcinoma (HCC), 9 from various lung tumours (all in men), 6 from the thyroid (all in women), 4 from female genital organs, and the remaining 11 from 9 other sites. Only 1 arose in the breast. Metastasis to the jawbone (often from lung) was more frequent than to oral soft tissues (often from liver). The authors comment that the high incidence of primary HCC in Korean males is probably the reason for the difference with Western findings.

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