

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

Oral surgery

Behavioural measurement of postoperative pain after oral surgery

Coulthard P, Pleuvry BJ et al.
Br J Oral Maxillofac Surg 2000; 38: 127-131

Self-assessed pain experience did not correspond to observed pain-related behaviour.

In 28 men and 36 women of mean age 24 yrs (range 18–42), two impacted lower third molars were removed surgically with some adjacent bone, under general anaesthesia. Prior to surgery, diclofenac was administered for analgesia, and all patients were assessed by visual analogue scores (VAS) for anxiety. Half completed a VAS for pain, and the other half, the McGill Pain Questionnaire (MPQ) before surgery.

After up to two hours of observation by recovery nurses, or earlier if patients requested analgesics, VAS scores and MPQ were repeated. Following surgery, 51 patients requested analgesia within 2 hrs. VAS and MPQ both showed a significant increase in pain after surgery, and anxiety significantly decreased. On the MPQ there was a difference between the choices of descriptive words by men and women.

Signs interpreted by observers as indicating pain, in 3/4 of women and 1/2 of men, included cradling the face in a hand, grimacing, crying and making a noise. The association between signs and self-rating of pain (VAS or MPQ) did not reach significance. The authors comment that the patients' self-reports are a better guide to their pain experience.

Endodontics

Postoperative discomfort associated with surgical and nonsurgical endodontic retreatment

Kvist T, Reit C
Endod Dent Traumatol 2000; 16: 71-74

Surgical retreatment was significantly less comfortable and resulted in higher indirect costs.

This paper is a sequel to a study in which 95 single-rooted teeth in 92 patients were randomized to surgical or nonsurgical endodontic retreatment because of persistent apical radiolucency at least 4 years after initial root treatment. All were enclosed lesions without periodontal communication.

Nonsurgical treatment was with thorough canal preparation and calcium hydroxide obturation in a sterile field of operation. Surgical treatment involved a flap, bone removal, apical curettage with apex resection and canal obturation by one of 2 methods.

Patients were asked to complete a questionnaire each of the next 7 days, and 88 adequate replies were returned. On each day there were significantly more reports of pain and swelling from the surgically-treated patients, and all of these patients reported swelling for the first 4 days. Absence from work for some time was reported by 11 patients, all in the surgical group. This group also consumed 4 times as many analgesic tablets as the nonsurgical group during the week.

Oral pathology

The incidence of cysts and tumors around impacted third molars

Güven O, Keskin A et al.
Int J Oral Maxillofac Surg 2000; 29: 131-135

Over a 10-year period, 3% of nearly 10,000 teeth were associated with these types of lesion.

From 1986 to 1996, 9994 impacted third molars (75% mandibular) were removed from 7582 patients in a Turkish university clinic. Symptoms such as swelling, pain, trismus or fever were present in 3782 patients, and 179 patients had symptoms due to cystic or neoplastic lesions. A further 3621 patients were asymptomatic, and the conditions diagnosed by radiography.

Associated cysts were diagnosed in 231 patients; 16 of these were odontogenic keratocysts, and the rest, dentigerous cysts. In 79 patients with associated tumours, 41 were ameloblastomas, one a squamous cell carcinoma and one a fibrosarcoma. The remainder were benign odontogenic tumours. The authors discuss the relevance of their findings to the question of which impacted third molars should be removed, including factors such as whether the patient returns for follow-up if the tooth is not removed.

Special care dentistry

Visual pedagogy in dentistry for children with autism

Bäckman B, Pilebro C
J Dent Child 1999; 66: 325-331

A carefully-structured introduction to dentistry led to a high degree of cooperation.

Autism, which affects 4 to 13 per 10,000 with around 3/4 of these male, was originally described in 1943 by a psychoanalytic psychiatrist as a disturbance in the parent-child relationship, but the discovery of multiple biological contributing factors led to an educational approach to the condition. The central problem is an inability to understand and interpret what is seen and heard.

Since autism is rarely diagnosed by the age of 2 or 3, the first contact with dentists may end in chaos, and in Sweden a special approach to management has been piloted. Autistic children communicate more easily with pictures than with words: the dentist first meets with the parents alone to discuss the child, and gives them a picture book to use in preparing the child. Then the child is led gradually through a programme of procedures: entering the surgery; sitting in the chair; opening mouth showing teeth; toothbrushing; examination first with mirror, then with probe; fluoride varnish; prophylaxis; and radiography.

In a test group of 16 autistic children, 12 reached examination with mirror and probe (11 with full cooperation) after 1.5 years in the programme (starting at mean age 4.8 yrs), compared with 4 out of 16 in the control group. The remaining 12 controls did not cooperate in any activity. All families in the pilot group want to continue. The initial introduction as far as sitting in the dental chair was completed in the first visit for almost all subjects, but further stages took considerably more visits for most subjects who achieved them.