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Traumatic injuries of the teeth in connection with general anaesthesia and the effect of use of mouthguards

Skeie A, Schwartz O
Endod Dent Traumatol 1999; 15: 33-36

This study found a low rate of dental injury in relation to hospital general anaesthesia, and recommended mouthguards for certain specific situations only.

Over a 10-year period, 120,086 general anaesthetics were given in a Danish hospital, and 75 cases of dental trauma were recorded, affecting 106 teeth. Most injuries were in the maxillary anterior region. A mouthguard was used for 10% of intubation or endoscopy cases, and in 8 patients did not prevent injury.

The mean age of injured patients was 61 years; dislocation or hypermobility affected 43 teeth, 50 were fractured, and 11 were avulsed. Since the wearing of a mouthguard was accompanied by a similar rate of injury to not wearing one, the authors recommended using the appliance only where there were clear problems anticipated.

A study of replanted permanent teeth in different age groups

Ebeleseder KA, Friehs S et al.
Endod Dent Traumatol 1998; 14: 274-278

In addition to the vitality of the periodontal ligament, this study suggests that age of the patient and tooth maturity are significant factors in outcome.

A comparison was made of three groups of replanted teeth (mainly incisors): 39 immature teeth, 35 mature teeth in adolescents, and 29 teeth in adults, 1–6 years (mean 2.5) after treatment in an Austrian university clinic. Pulps were extirpated in all adult teeth, but only if indicated in other cases. Where conditions favoured it, 33 teeth were replanted with no root surface treatment, but in other cases, various treatments were given. All teeth were splinted.

Twenty-three teeth were lost, 7 because of cervical resorption. There was a greater arrest of alveolar growth and greater root surface loss by replacement resorption in the two younger groups, but there were no differences between groups in aesthetics.

The authors consider that the replantation of teeth with a doubtful prognosis may help in adult patients, but where replantation is delayed the outcome is less satisfactory in younger patients with mature teeth.

Inferior alveolar nerve function after mandibular osteotomies

Westermark A, Bystedt H et al.
Br J Oral Maxillofac Surg 1998; 36: 425-428

A much higher rate of neurosensory deficiency was apparent after sagittal split osteotomy (SSO) than after other procedures.

Two years after orthognathic surgery, 1,034 patients were reviewed. Mandibular osteotomies had been performed in 818 patients, giving 1,636 nerves for evaluation.

After vertical ramus osteotomy (VRO) with intra-oral approach, 91% of 590 nerves had normal responses to stimuli, and with extra-oral approach, 81% of 140 nerves. With genioplasty (GP) alone, 89% of 78 nerves were normal, and with SSO, 61% of 548 nerves. After combinations of VRO and GP, overall 79% of 58 nerves were normal, and after SSO with GP, 56% of 162 nerves.

The findings are in agreement with other studies, and in a following paper the SSO details are examined further. The authors give reasons why they consider that soft tissue dissection on the medial aspect of the ramus may account for the increased risk of neural damage with this technique.

Orthognathic surgery: the patients' perspective

Cheng LHH, Roles D et al.
Br J Oral Maxillofac Surg 1998; 36: 261-263

This study suggests that patients considered they had benefitted from improved function even more than in appearance.

A questionnaire was sent to 165 patients who had received orthognathic surgery over an 11 year period in an English provincial hospital, and 139 (84%) responded.

Most of these patients (114) were in the 16–25 year age group at the time of surgery. Patients indicated their satisfaction on a –10 to +10 visual analogue scale for appearance (mean +6.78) and function (mean +7.24) and this difference in scores was significant.

In total, 125 patients (90%) were satisfied with both appearance and function, 10 with appearance alone, 3 with function alone, and one patient with neither; 136 thought the operation worthwhile and 128 would be prepared hypothetically to go through it again for the same benefit. The authors review 13 studies giving similar results, and comment on the importance of benefits in oral function because of the tendency of some NHS administrators to view these operations as cosmetic only.