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## MAXILLOFACIAL SURGERY

### Prevalence of postoperative complications after orthognathic surgery: a 15-year review

Chow LK, Singh B *et al.* *J Oral Maxillofac Surg* 2007; **65**: 984-992

Postoperative antibiotics appeared more useful than preoperative antibiotics in preventing infections.

Infection after osteotomies is reported as 1% to 33%, with numerous relevant factors. Antibiotics have reduced infection to some extent, but the use of prophylactic antibiotics has been criticised. In this study, records were examined of 1,294 patients in a Hong Kong hospital from 1990-2004.

In 11 patients, complications unrelated to the surgery were found, and in 125, related complications were identified, 96 of these being postoperative infection (a rate of 7.4%). Acute infection was found in 56 patients within 6 weeks of surgery.

Penicillin prophylaxis was given to 86% of patients, and the remainder received either non-penicillin or combination antimicrobials. A single preoperative dose of penicillin was associated with a 17% rate of infection, and the rate was 6.4% in the penicillin group, compared with 1% in those with non-penicillin or combination antibiotics.

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## IMPLANT DENTISTRY; BONE GRAFTING

### Augmentation of the posterior atrophic edentulous maxilla with implants placed in the ulna: a prospective single-blind controlled clinical trial

Cannizzaro G, Leone M *et al.* *Int J Oral Maxillofac Implants* 2007; **22**: 280-288

Transfer of ulnar bone with implants after 6 weeks appears a useful approach to sinus augmentation.

Large maxillary sinuses are a significant problem in implant surgery, and grafting is commonly used to lift them. This study considered the use of implants placed in the ulna, from which a bone block including them was harvested 6 weeks later. Extraoral surgery was performed by an orthopaedic surgeon, and intraoral surgery by a dentist. Although this was not a randomised trial, a comparison was made between 20 patients receiving mental, tibial or iliac crest particulate grafts and 20 receiving the new procedure, with patients making the choice.

There were no dropouts, no prosthesis or implant failure, and no major complications with either procedure. The authors consider the new procedure may shorten treatment time and vertically augment the bone surrounding the implants.

DOI: 10.1038/bdj.2007.899

## MAXILLOFACIAL SURGERY

### Facial nerve morbidity after retrograde nerve dissection in parotid surgery for benign disease: a 10-year prospective observational study of 136 cases

O'Regan B, Bharadwaj G *et al.* *Br J Oral Maxillofac Surg* 2007; **45**: 101-107

Initial morbidity was high at 1 week, but had resolved in almost all cases after 6 months.

Traditional parotidectomy for benign tumours is currently under question. Antegrade facial nerve dissection from the trunk forwards also presents difficulties in some cases. Retrograde dissection has been suggested as a useful technique. Patients in this study included 51 with pleomorphic adenoma, 42 with sialoadenitis, and the remainder with 7 other conditions. Nerves were monitored during surgery.

At 1 week, 34% of patients were fully recovered, but 66% had some facial nerve paresis, with the degree slight in about 4/5. At 1 month, 62% were fully recovered, and at 3 months, 84%. At 6 and 12 months only one patient had a minor permanent paresis of the marginal mandibular nerve. The authors consider that the retrograde technique has several advantages for the procedure.

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## PERIODONTICS; OBSTETRICS

### Third molars and progression of periodontal pathology during pregnancy

Moss KL, Ruvo AT *et al.* *J Oral Maxillofac Surg* 2007; **65**: 1065-1069

Periodontitis appeared to progress in association with third molar (M3) periodontal lesions.

In pregnancy, periodontal disease may be more likely to progress in the molar region, and M3s may be involved. In the present investigation, pregnant patients were enrolled before 26 weeks' gestation, examined, and then examined again within 72 hrs of delivery.

In all, 891 subjects were enrolled, and 360 had visible M3s. In 122 of these, progression of disease (2 mm or more increase in PD) was noted postpartum. In 176 who had an M3 PD of 4+ mm at first examination, 74 subjects had progression; in 184 who did not, 48 progressed ( $P = 0.001$ ). Molar regions were more likely to have progression of periodontitis at the postpartum examination. The authors discuss the possible status of false pocketing around M3s in their subjects.

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