

ABSTRACTS

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ORAL SURGERY; ADVERSE EFFECTS

Frequency of trigeminal nerve injuries following third molar removal

Robert RC, Bacchetti P et al. *J Oral Maxillofac Surg* 2005; **63**: 732–735

Injuries of this sort were inversely related to operator experience, with the implication that a preventive approach might inhibit training of new surgeons.

Although potential nerve injury following lower molar removal is a factor affecting surgical technique, its frequency is reported as from 0.5% to 5% for the inferior alveolar nerve (IAN), and 0.6% to 2% for the lingual nerve (LN). A questionnaire was sent to 564 oral and maxillofacial surgeons (OMFSs) in California, and 535 replied.

Over a 12 month period, almost all OMFSs reported IAN injury, and half reported LN injury. The median rate for IAN injury was 0.4% of extractions, and for LN, 0.1%. The highest respective individual rates were 9.3% and 2.3%. Mean permanent injury rates for the nerves were 1/10 of the median rates. There was a strong correlation of nerve injury rates with OMFS years of experience, and also with numbers of extractions by individual OMFSs per year. The cause of injury was known more often for IAN than for LN.

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ORAL SURGERY; PERIODONTICS

Is there a role for reconstructive techniques to prevent periodontal defects after third molar surgery?

Dodson TB. *J Oral Maxillofac Surg* 2005; **63**: 891–896

This study suggests that placing demineralised bone powder (DBP) in sockets may reduce such defects after extraction.

Some patients are at high risk of 2nd molar (M2) periodontal defects after 3rd molar (M3) removal. In this study, 12 such patients (mean age 30 yrs, 3 tobacco smokers) with 18 such M3s were randomised to 3 categories in an original cohort of 27 subjects: DBP in the extraction wound, resorbable guided tissue regeneration (GTR) membrane placed over the socket, or control. Probing attachment level (PAL) on the distal of M2 was evaluated up to 26 weeks postoperatively.

Preoperatively, mean PAL in mm was 6.8 for controls, 5.4 for GTR and 7.6 for DBP ($P = 0.43$). Respective 26 week scores were: 3.8, 3.0 and 1.4 ($P = 0.002$). The differences between GTR and DBP and between DBP and control were significant, but not that between GTR and control. The author draws attention to the small sample and possible selection bias in the study.

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ORAL PHYSIOLOGY

Is there a greater mandibular movement capacity towards the left? Verification of an observation from 1921

Türp JC, Alpaslan C et al. *J Oral Rehabil* 2005; **32**: 242–247

Asymmetry appears to be the norm in mandibular movements.

In 1921, a Berlin dentist reported that the majority of individuals could move their mandibles more to the left than the right. In this study, mandibular movements of 141 right-handed healthy individuals (83 female) were compared with those of 141 patients with TMJ disorders (111).

TMJ patients had significantly less maximum jaw opening and left lateroversion than healthy subjects, but similar right lateroversion. In both groups, significantly more subjects were capable of greater left than right lateroversion.

The authors suggest that the effect is related to the development of the right lateral pterygoid muscle, which is known to be greater than the left muscle in right-handed individuals.

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DISABILITY; ORAL HEALTH

Oral health-related quality of life of stroke survivors on discharge from hospital after rehabilitation

McMillan AS, Leung KCM et al. *J Oral Rehabil* 2005; **32**: 495–503

There were several differences between recent stroke survivors and a matched control group.

Stroke is a significant cause of disability, and may have effects on maintenance of oral health. In a Hong Kong hospital, 43 stroke survivors were assessed prior to discharge from rehabilitation after about 25 days, and compared with a similar group of 43 community-dwelling elderly subjects.

The control group had significantly better education than stroke survivors. In most aspects of quality of life, the groups were similar. However, significant differences between groups were that the stroke patients were less able to speak clearly, were less sensitive to food temperature and flavour, and had fewer and less satisfactorily treated teeth.

The authors comment that the impact of oral conditions on quality of life has been found to be less in Chinese than other ethnic groups in some studies.

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