

Other journals in brief

A selection of abstracts of clinically relevant papers from other journals.

The abstracts on this page have been chosen and edited by John R. Radford.

VERTIGO: CLOSED SINUS LIFT

Benign paroxysmal positional vertigo following closed sinus floor elevation procedure: mallet osteotomes vs. screwable osteotomes. A triple blind randomized controlled trial

Sammartino G, Mariniello M *et al.* *Clin Oral Implants Res* 2011; **22**: 669–672

Although rare, there is a risk of transient vertigo following a closed sinus floor elevation.

In order to augment bone vertically to accommodate a maxillary implant, patients can receive a closed sinus floor elevation (Summer's technique). During this operation, canaliths can become dislodged in the middle ear that result in vertigo. This has a reported incidence of 2%. In this study, two surgeons carried out a closed sinus lift using either a mallet osteotome or screwable osteotome (98 patients in both groups). Otolaryngologists then assessed for vertigo using, among other tests, the Dix–Hallpike manoeuvre. Only when the closed sinus floor elevation procedure was carried out with a mallet osteotome was vertigo observed in 3 patients. The vertigo was resolved with the Epley re-positioning manoeuvre. For Dix–Hallpike and Epley re-positioning manoeuvres, access YouTube.

DOI: 10.1038/sj.bdj.2011.981

PAIN AFTER ENDODONTICS

Frequency of persistent tooth pain after root canal therapy: a systematic review and meta-analysis

Nixdorf DR, Moana-Filho EJ *et al.* *J Endod* 2010; **36**: 224–230

High quality studies report that almost one in ten patients experience post-operative pain after root canal therapy.

In this study, the criterion adopted for endodontic failure was a patient-centred outcome, that of persistent pain. This symptom had to occur for at least 6 months following completion of the endodontic procedure. No restriction was placed on what provoked the pain. Only permanent teeth that had received root canal therapy, including re-treatments, were included. Of 770 articles accessed, 14 were identified by hand searching. Several papers were published in languages other than English. Twenty-six papers met inclusion criteria. The meta-analysis revealed a startling difference between the numbers of patients who experienced post-operative pain in prospective studies compared with those from retrospective studies (7.6% *v* 0.9% respectively). The overall frequency for persistent pain was 5.3%.

DOI: 10.1038/sj.bdj.2011.983

ZIRCONIA: CERAMIC STEEL?

Influence of water sorption of the underlying abutment on fracture resistance of zirconia copings

Behr M, Weiser F *et al.* *Acta Odontol Scand* 2011; **69**: 170–175

Water sorption by abutment materials damages zirconia substructures.

Hygroscopic expansion of resin-based core materials and/or luting agents have an impact on the fracture resistance of glass-ceramic restorations. In this *in vitro* study, zirconia substructures were milled in order to fit simulated cores. The cores were constructed from three resins, two of which were resin composite materials. All resins had different water sorption properties. Zirconia copings that had undergone thermal cycling and mechanical loading had a significantly lower fracture resistance when luted to cores with high water sorption than those cores with moderate water sorption. Although zirconia has superior mechanical properties to most glass-ceramic materials, it does not 'perform like a ductile metal alloy'. The term 'ceramic steel' is disingenuous.

DOI: 10.1038/sj.bdj.2011.982

LARYNGOSCOPY

A prospective non-randomised study to compare oral trauma from laryngoscope versus laryngeal mask insertion

Mourão J, Neto J *et al.* *Dent Traumatol* 2011; **27**: 127–130

'...most anaesthesiologists used the maxillary incisors as a fulcrum of leverage...'

In this prospective study, 121 adults were examined for injuries to the teeth and soft tissues before and after receiving general anaesthesia. The airway was managed using either 1) laryngoscopy and orotracheal intubation, or 2) a laryngeal mask positioned without the use of a laryngoscope. When the anaesthetists used laryngoscopy (type(s) of laryngoscope not stated), it was reported that over 80% of the patients suffered some form of oral injury with over one-third affecting the teeth. Nevertheless, when a laryngeal mask was used, the investigators still reported that one in every five patients suffered an injury, although in only 2.0% was there damage to the teeth. Taken as a whole, most of the injuries to teeth comprised fractures to enamel with avulsion of teeth being rare. The investigators did not give details as to how they linked the tooth injury to the method of airway management.

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