

# 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.

## ORTHODONTIC ADHESIVE CEMENTS

### Clinical and laboratory perspectives of improved orthodontic bonding to normal, hypoplastic, and fluorosed enamel

Wiltshire WA, Noble J. *Semin Orthod* 2010; **16**: 55-65

**Although the statement 'stronger is not necessarily better' has been used to justify the selection of glass ionomer as an orthodontic cement, it applies to all cements.**

Following debonding, ideally there should be no damage to, and minimal remaining cement on the enamel surface. When bonding to fluorosed enamel, this structure is more resistant to acid etching. Yet because of the increased porosity of fluorosed enamel, its physical properties may be compromised and, as a result, enamel damage may occur during the debonding process. When considering orthodontic adhesive cements, self-etching primers (SEP) are favoured as they save chair time and are less 'aggressive' to the enamel. If the enamel surface is judged to be less than ideal and when using a SEP, 'it may be prudent to wait 24 hours after the brackets are bonded, when increased bond strengths are present, before insertion and tie-in of the archwire.'

DOI: 10.1038/sj.bdj.2010.1150

## DRY NEEDLING

### Short-term effects of dry needling of active myofascial trigger points in the masseter muscle in patients with temporomandibular disorders

Fernández-Carnero J, La Touche R *et al. J Orofac Pain* 2010; **24**: 106-112

**Dry needling reduced symptoms and signs in those with 'myofascial TMD'.**

Dry needling is different from acupuncture, in that the trigger points (TrPs) used in dry-needling do not correspond to acupuncture points or meridians. Dry needling appears to reduce pain in regions as diverse as the lower back and knee. The aim of this study was to determine if dry needling could achieve favourable outcomes in those suffering from 'myofascial TMD'. Twelve young women with this spectrum of disorders were recruited to the study. They attended two appointments at which they received either deep dry needling when a needle was inserted into active TrPs of a masseter muscle (using an extra-oral approach), or sham dry needling when the needle penetrated only a few millimetres through the skin. In the short term, dry needling significantly reduced symptoms and signs in those with 'myofascial TMD'.

DOI: 10.1038/sj.bdj.2010.1151

## VERTEBRAL ARTERY DISSECTION

### Dental procedures and stroke: a case of vertebral artery dissection

Shobha N, Bhatia R *et al. J Can Dent Assoc* 2010; **76**: a82

**'Headache and neck pain are important warning symptoms of dissection'.**

Vertebral artery dissection (VAD) is a significant cause of a stroke in an otherwise healthy person. It has an annual incidence of about 1 per 100 000. In VAD, blood enters a tear in the arterial wall resulting in either narrowing of the vessel, or dilation, that in turn can cause an aneurysm. This paper describes the sequence of events in a 63-year-old, previously healthy man who suffered a VAD following dental treatment. During this treatment, he held his neck in an extended and rotated position for about 1.5 hours. That evening he experienced a severe throbbing headache with neck pain and bouts of vomiting. The following day, angiography showed a thrombus in the vertebral artery which subsequently resulted in a cerebellar artery territory infarct. Thankfully, intensive treatment resulted in a steady recovery with only mild residual sensory deficits.

DOI: 10.1038/sj.bdj.2010.1152

## INTRUDED PERMANENT INCISOR TEETH

### UK National Clinical Guidelines in Paediatric Dentistry: treatment of traumatically intruded permanent incisor teeth in children

Albadri S, Zaitoun H *et al. Int J Paediatr Dent* 2010; **20**: 1-2

**About one half of traumatically intruded permanent teeth undergo root resorption.**

This is a concise and authoritative guideline. As intrusion of permanent teeth is a rare occurrence, there is a lack of agreement as to how this should be managed. There are the following three approaches: 1) passive repositioning, 2) immediate surgical repositioning and 3) orthodontic repositioning. Passive repositioning is indicated for teeth with incomplete root development. Immediate surgical repositioning is carried out when there is complete root development and there is moderate (3-6mm) to severe (<6mm) intrusion. Root canal treatment, two weeks after injury, is 'often indicated' in those teeth with complete root formation. Antibiotics are only indicated if there is associated hard or soft tissue contamination. There is a significant risk of root resorption in those permanent teeth that have been intruded.

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