

# 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.

## MINI-IMPLANT ANCHORAGE

### Evaluation of orthodontic mini-implant anchorage in premolar extraction therapy in adolescents

Garfinkle J S, Cunningham L L *et al.* *Amer J Orthod Dentofacial Orthop* 2008; **133**: 642-653

#### Mini-implant anchorage shows promise in adolescent patients.

There are few controlled studies setting out the boundaries for the use of orthodontic mini-implants (OMI) for anchorage. This study examined whether or not OMI could provide anchorage for space closure following the extraction of either first or second premolar teeth, and the effect of immediate or delayed loading. Eighty-two OMI, each measuring 1.6 mm in diameter and 6 mm in length, were placed using a surgical 'notching procedure' in either the maxillary or mandibular buccal sulci in 13 adolescents. One side was immediately loaded with 250 g and the contra-lateral side loaded after 3-5 weeks. There was no significant difference in space closure between those OMI that were immediately loaded and those where loading was delayed. Their combined success was significantly higher compared with control, unloaded OMI. Placement and tolerance of OMI were well received.

DOI: 10.1038/sj.bdj.2008.995

## CARIES; WEIGHT

### Body adiposity status in teenagers and snacking habits in early childhood in relation to approximal caries at 15 years of age

Alm A, Fähræus C *et al.* *Int J Paed Dent* 2008; **18**: 189-196

#### Overweight teenagers would appear to have more caries.

A recently published systematic review examining relationships between obesity and dental caries reported contradictory results. The approximal caries status, as shown by bitewing radiographs, was recorded in 402, 15-year-old, adolescents, in addition to their body adiposity status (isoBMI). Snacking habits had been quantified and recorded, when their children were 1 and 3 years of age, by interviewing the parents. Overweight and obese adolescents had 1.6 times higher approximal caries than those who were normal weight (mean proximal caries prevalence and fillings 4.64 vs 2.94;  $P = 0.014$ ). Snacking during early childhood appeared to be a risk factor for caries at 15 years of age. The authors conclude that multi-disciplinary approaches should be used to encourage 'healthy teeth' and 'healthy weight'.

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## ETHICS

### Human rights and oral health care: a report of the 7th international dental ethics and law congress

*J Canad Dent Assoc* 2008; **74**: 337-340

#### The dentist working in and for society.

This paper summaries some of the ethical and moral issues explored at this congress. The opening session examined 'Human Rights and Dental Research'. One speaker reminded the audience that a clinical dental investigator faced three major challenges; gathering research data instead of healing, obtaining valid information and coping with vulnerable and dependent subjects. Another contributor illustrated these points, by stating the dilemmas faced when carrying out studies on rotavirus vaccines. A further theme explored the issues dentists encounter when working in totalitarian states. In the plenary session, it was asserted that preventive strategies, regulatory authorities and international associations safeguard human freedoms.

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## ASPIRATION PNEUMONIA

### Professional oral health care reduces the number of oropharyngeal bacteria

Ishikawa A, Yoneyama T *et al.* *J Dent Res* 2008; **87**: 594-598

#### Professional debridement is more effective than the use of a mouthwash.

The aspiration of oropharyngeal bacteria, particularly by those with cerebrovascular disease and/or cognitive impairment, may cause pneumonia. In this study, groups comprising of about 70 residents in each of three care-homes in Japan, received different oral care regimens over a 5 month period, some delivered by dental hygienists. Twenty percent of subjects did not complete the study. Weekly professional debridement was more effective at removing oropharyngeal bacteria than daily gargling with 0.35% povidone iodine. Although the levels of certain microbial species decreased or disappeared during the study, this was not reflected consistently by the debris scores, nor the number of febrile days that the subjects experienced. The latter measurement was an implied marker for aspiration pneumonia. In the discussion, the authors assert the importance of professional oral care in comparison with the use of chemical disinfection by this mouthwash.

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