

# 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.

## ASTHMA

### Asthma and oral health: a review

Thomas MS, Parolia A *et al.* *Aust Dent J* 2010; 55: 128–133

**Beta-2 agonists, when swallowed, may affect oesophageal function that in turn may result in dental erosion.**

Not all studies have demonstrated associations between asthma and caries, asthma and dental erosion and asthma and periodontal disease. In those papers that report relationships, several explanations have been proposed. These range from the effects that the medications used to treat asthma, can have on salivary and oesophageal functions. In addition, constituents in the inhalers could exert other untoward effects. An explanation for this lack of consistency in the literature, is that various drug regimens are used to treat asthma; those patients who take beta-2 agonists (salbutamol) for example, have a significant reduction in salivary secretion. When considering oral candidiasis, there is an association between this condition and asthmatics taking medication.

DOI: 10.1038/sj.bdj.2010.947

## MISWAK

### Oral fluoride retention in orthodontic patients with and without fixed appliances after using different fluoridated home-care products

Baeshen H, Kjellberg H *et al.* *Acta Odontol Scand* 2010; 68: 185–192

**The miswak chewing stick, impregnated with fluoride, may have a role in 'orthodontic patients in countries where it is used frequently, since it has a 'dual effect, i.e. both brushing and F delivery.'**

A recent study has shown that the use of the miswak is more popular than the toothbrush in children living in a province of Saudi Arabia. It has also been stated that the miswak can be impregnated with fluoride. This study reports the concentrations of fluoride in whole saliva and approximal saliva during orthodontic treatment, and 1 week after debonding. During these periods, the patients used a miswak impregnated with fluoride, and other fluoride-containing products. Not surprisingly, those vehicles with high fluoride concentrations had high fluoride retention in the saliva samples. What may seem counterintuitive however, patients with orthodontic appliances demonstrated higher retention of fluoride. Of the fluoride products tested, the miswak, impregnated with 0.5% NaF, resulted in highest retention value in approximal saliva in patients wearing orthodontic appliances.

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## ORAL HEALTH LITERACY

### Proceedings: 9th World Congress on Preventive Dentistry (WCPD): "Community Participation and Global Alliances for Lifelong Oral Health for All," Phuket, Thailand. Theme IV: Oral Health Literacy

Clarkson J, Watt RG *et al.* *Adv Dent Res* 2010; 22: 22–26

**'... an important means of helping to close the gap between knowledge and action.'**

This Congress explored four themes, one of which was oral health literacy. Oral health literacy aims to define more clearly effective health information by, for example, the use of plain language and conveying information 'in a culturally competent way'. 'Action' is the key dimension. This approach is given added weight by causal associations between oral and systemic diseases. Oral health literacy extends beyond an individual's ('downstream') understanding, but includes 'action to change the determinants of oral health in the environment' and to take societal action ('upstream') and 'intermediate' (by school health education programmes, for example). Such parlance, should not necessarily detract the reader from this 'relatively new concept' in oral health promotion.

DOI: 10.1038/sj.bdj.2010.949

## SELF-ETCHING PRIMERS IN ORTHODONTICS

### Influence of saliva contamination on the shear bond strength of orthodontic brackets bonded with self-etching adhesive systems

Maia SRC, Cavalli V *et al.* *Am J Orthod Dentofacial Orthop* 2010; 138: 79–83

**This study was not able to substantiate the manufacturers' claims that self-etching primers (SEPS) can be used on wet enamel.**

Combining etching and priming by the use of a SEP reduces the steps and time required to bond orthodontic brackets to enamel. Notwithstanding that a SEP would inevitably minimise the potential for salivary contamination, the aim of this study was to examine if salivary contamination is detrimental to bond strengths. Using a universal testing machine, shear bond testing was carried out after bonding stainless steel brackets to 135 bovine incisor crowns. Of the three systems tested, Transbond™ Plus Self Etching Primer (3M Unitek) had the highest shear bond strengths. Generally, these values reduced after contamination with the artificial saliva, although rinsing with water after contamination restored original bond strengths. It should be noted that the artificial saliva used in this study was carmellose sodium.

DOI: 10.1038/sj.bdj.2010.950