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.

DENTAL FEAR

Towards a better understanding of dental anxiety and fear: cognitions vs. experiences

Armfield JM. *Eur J Oral Sci* 2010; **118**: 259–264

Is dental fear a consequence of the 'perceptions of the dental experience'?

A questionnaire was mailed to a random sample of 1,084 Australian adults. This questionnaire was used to measure 1) dental fear (using the Index of Dental Anxiety and Fear: IDAF-4C) and 2) dental experiences. The response rate was 71.7%. The results showed that 'perceptions of uncontrollability, unpredictability, dangerousness, and disgustingness were superior predictors of dental fear compared with negative dental experiences' (intense pain, considerable discomfort, gagging and fainting). It would therefore appear that the Rachman's three-pathways model, whereby an adverse experience results in fear, maybe too simplistic when applied to dental fear. Why, for example, do a proportion of patients have bad dental experience yet few go on to develop dental fear and others have dental fear yet have never had such trauma?

DOI: 10.1038/sj.bdj.2010.693

MANAGING DEEP CARIES

Treatment of deep caries lesions in adults: randomized clinical trials comparing stepwise vs. direct complete excavation, and direct pulp capping vs. partial pulpotomy

Bjørndal L, Reit C *et al.* *Eur J Oral Sci* 2010; **118**: 290–297

Using either a stepwise or direct complete excavation approach, over 60% of teeth maintained vitality without an apical radiolucency, although stepwise did better ($P = 0.044$).

This centrally randomised, patient-blinded study, compared stepwise *vs* direct complete excavation of deep caries in 314 adults, treated in 6 different centres. One tooth was treated in each patient and results were assessed after 1 year. When considering outcome failures (except for pulp exposure), there was no difference between the treatment regimens. Stepwise had a significantly higher success (74.1% *vs* 62.4%, $p = 0.444$) in those pulps that were not exposed. In that arm of the study that compared a direct pulp cap *vs* partial pulpotomy, for those 68 patients with exposed pulps, there was no difference (31.8% *vs* 34.5% respectively) in success between these two different treatment approaches.

DOI: 10.1038/sj.bdj.2010.694

WHITE SPOT LESIONS

Caries outcomes after orthodontic treatment with fixed appliances: do lingual brackets make a difference?

van der Veen MH, Attin R *et al.* *Eur J Oral Sci* 2010; **118**: 298–303

Fewer white spot lesions associated with lingual brackets compared with buccal brackets.

Using a split mouth design, lingual brackets were placed in one arch and buccal brackets in the opposing arch in each of 28 patients. Regardless of bracket placement, when examined visually, only 5 subjects developed white spot lesions (WSL). When WSL were measured using quantified light-induced fluorescence, both buccal and lingual brackets were associated with significant increases in the number of WSL, areas of WSL and integrated fluorescent loss, but more so with buccal brackets. The authors suggest explanations for these findings are that lingual brackets 'cover nearly the entire lingual aspect of the teeth' and are custom-made thereby facilitating an optimum luting seal. The authors state there is an association between WSL and progressing caries but curiously do not mention the long-term dental aesthetic concern of white spot lesions.

DOI: 10.1038/sj.bdj.2010.695

DENTAL FEAR

Can parents and children evaluate each others dental fear?

Luoto A, Tolvanen M *et al.* *Eur J Oral Sci* 2010; **118**: 254–258

Children could not identify if their parents suffered from dental fear, nor parents likewise recognise their children's dental fear.

Dental fear in over two thousand subjects from two cities in Finland, comprising 11–16-year-old adolescents and their parents, was measured using single 5-point Likert-scale questions. The Kappa statistic, which measures the agreement when adolescents assessed their parents' dental fear and vice-versa, was always <0.42 (+1 = perfect agreement, 0 = no agreement and -1 = complete disagreement). Interestingly, regardless of their child's actual fear, fearful parents generally assessed their child to be fearful. However, fearful adolescents did not have a clue as to whether or not their parents shared their fear of receiving dental care. The results of this study would support others that suggest 'the transfer of dental fear from parents to their children does not take place at a conscious level'.

DOI: 10.1038/sj.bdj.2010.696