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.

'A VICIOUS CIRCLE'

Orofacial esthetics and dental anxiety: associations with oral and psychological health

Carlsson V, Hakerberg M *et al. Acta Odontol Scand* 2014;
DOI: 10.3109/00016357.2014.898786

Those with dental anxiety also have a low perception of their orofacial aesthetics.

Blindingly obvious, but those with dental anxiety avoid dental care and that in turn is associated with poor oral health. The concept of this 'vicious circle' has been attributed to Berggren. Others have also linked this circle to social and functional impairment. The aim of this study was to explore whether or not those with dental anxiety, tie this in with their orofacial aesthetics and their psychological and oral health. This cross-sectional study was carried out with 152 adult patients who were receiving care at a dental anxiety clinic. They each received a dental examination and were invited to complete questionnaires exploring their orofacial aesthetics (orofacial esthetic scale), self-rated oral health, general and dental anxiety, and depression. Those with dental anxiety had lower ratings of satisfaction for all aspects of their orofacial aesthetics compared with the general population (data from another study that examined 1,159 subjects) and this was associated with dental disease, self-rated oral health, general anxiety and depression. The investigators state that no causality can be made.

DOI: 10.1038/sj.bdj.2014.827

'THINKING OF YOUR TEETH...'

Clinical factors and self-perceived oral health

Schützhold S, Holtfreter B *et al. Eur J Oral Sci* 2014; 122: 134–141

'Sociodemographic and behavioral variables were not significantly associated with self-perceived oral health.'

'Thinking of your teeth, how would you rate their condition?' Such single-item questions, as used in this study, are increasingly being used to ascertain how people regard their oral health. Multinomial logistic regression was used to analyse what a group of subjects aged 35–44 years old ($n = 891$) and another group aged 65–74 years old ($n = 760$) felt about their caries and periodontal conditions, and their perception of wearing dentures. This data was collected during the Fourth German Oral Health Study. Twenty percent of all participants considered they had poor oral health with a similar proportion in those aged 65–74 years old. Missing teeth in the 35–44-year-olds, and the provision of a removable denture in the 65–74-year-olds were associated with perceived poor oral health. Caries status and periodontal status, the latter sometimes referred to as the silent disease, 'were not as strongly associated with self-perceived oral health'. In a personal communication with the investigators, they stated that the participants had not been informed of their caries or periodontal conditions before they were asked to assess their oral health.

DOI: 10.1038/sj.bdj.2014.828

MONOLITHIC ZIRCONIA RESTORATIONS

Quantification of the amount of light passing through zirconia: the effect of material shade, thickness, and curing conditions

Ilie N, Stawarczyk B. *J Dent* 2014; 42: 684–690

Dual-cure cements should be used to lute monolithic zirconia restorations.

Monolithic zirconia restorations are increasingly being used 1) to overcome the problem with chipping of the aesthetic veneer, and 2) to minimise preparation of teeth, as these restorations are thinner than laminated zirconia restorations. In this study, irradiance (simply, the amount of light arriving at a surface) emitted by a LED curing unit, was measured when the curing light was positioned at varying distances (direct contact to 7 mm) from blocks of zirconia of different thicknesses (0.5–3 mm) and shades (CLO: unshaded – CL4) and blocks of control glass ceramic material of different thicknesses. Irradiance through the glass ceramic control was significantly higher than that through zirconia. When considering zirconia only, regardless of ceramic thickness or curing conditions (distance from block), unshaded zirconia had the highest irradiance. For all materials, irradiance decreased exponentially with increased ceramic thickness. An important clinical implication of this study is that 'less-light-sensitive dual-cured cements must be used' to lute restorations of thickness greater than 1.5 mm, or dark shades of zirconia.

DOI: 10.1038/sj.bdj.2014.829

AGGREGATIBACTER ACTINOMYCETEMCOMITANS

Microbial composition of atherosclerotic plaques

Calandrin CA, Ribeiro AC *et al. Oral Dis* 2014; 20: e128–134

Aggregatibacter actinomycetemcomitans was detected in 20% of atherosclerotic plaques and in addition, this bacterial species has a virulence repertoire that may implicate it in atherosclerosis.

These investigators used a 16S rRNA-based method to identify bacteria associated with excised atherosclerotic plaques. 'High-throughput sequencing techniques targeting the hypervariable regions of 16S rRNA gene would have provided more robust analyses...' but this method requires particular expertise. In this study, atheromas were removed from 35 patients who had received an aorta endarterectomy. Before surgery, patients were allocated to the following groups: 1) edentulous, 2) those with periodontal health, 3) early periodontitis, and 4) moderate and advanced periodontitis. Bacterial DNA was detected in 12 of the 35 atherosclerotic plaques. Almost two thirds of the phylotypes were uncharacterised species. *Aggregatibacter actinomycetemcomitans* was detected in 20% of the samples ($n = 7$). There was no relationship between the detection of *A. actinomycetemcomitans* and patients with the different severities of periodontal disease. The oral microbiota of the subjects was not characterised.

DOI: 10.1038/sj.bdj.2014.830