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.

ABSTRACTS

ORTHODONTIC CONSIDERATIONS

Compromised first permanent molars: an orthodontic perspective

Ong DC-V, Bleakley JE. *Aust Dent J* 2010; 55: 2–14

'...the ideal time for removal of compromised lower FPMs can be as early as 8–9 years of age, but generally around 10 years of age'. Should a compromised first permanent molar (FPM) tooth be extracted now or later and, if so, should there be balancing and/or compensating extractions? Spontaneous space closure is unpredictable if the lower FPM is extracted after eruption of the second permanent molar tooth. Such an extraction of a compromised FPM should be 'generally around 10 years of age'. In the mixed dentition, there would appear 'to be less potential for the lower FPM to over-erupt when a compromised upper FPM has been extracted' than when a lower FPM is extracted. Balanced extractions should be considered when there is significant crowding but the tooth scheduled for extraction does not necessarily need to be the contra-lateral FPM. If unsure, a specialist orthodontic opinion should be sought.

DOI: 10.1038/sj.bdj.2010.604

CARDIOVASCULAR DISEASE

Toothbrushing, inflammation, and risk of cardiovascular disease: results from Scottish Health Survey

de Oliveira C, Watt R *et al.* *BMJ* 2010; 340: c2451 doi: 10.1136/bmj.c2451

More links between oral disease and cardiovascular disease.

This study explored associations between toothbrushing, an indicator of periodontal disease, and cardiovascular disease. In addition, the investigators looked for associations between toothbrushing, cardiovascular disease and biomarkers of inflammation (specifically, C reactive protein and fibrinogen). This study examined 11,869 middle-aged subjects. For this cohort, over an average follow-up period of 8.1 years, there were 555 cardiovascular disease events, of which 170 were fatal. When multivariate modelling was used to take account of factors such as 'age, sex, socioeconomic group, smoking, visits to dentist, BMI, family history of cardiovascular disease, hypertension, and diagnosis of diabetes', cardiovascular disease was associated with those who never/rarely brushed their teeth. In addition, these subjects had increased concentrations of both C reactive protein and fibrinogen.

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PRECAUTIONARY PRINCIPLE

Exposure to dental amalgam restorations in pregnant women

Lygre GB, Björkman L *et al.* *Community Dent Oral Epidemiol* 2010. doi: 10.1111/j.1600-0528.2010.00544.x

Amalgam restorations and pregnancy.

The fundamental research question as to whether or not pre-natal exposure to mercury from amalgam fillings could potentially harm the foetus is not investigated in this study. Instead, associations are identified between a range of factors observed in pregnant women and amalgam restorations. Data was obtained from two questionnaires obtained from 67,355 pregnant mothers recruited to the Norwegian Mother and Child Cohort Study. Appropriate statistical analyses showed that 'age, education level, BMI, and smoking are associated with' those women having more than 12 teeth with amalgam fillings. Despite recommendations to the contrary, 4.5% of the subjects in this study 'reported that amalgam fillings had been placed or removed' during pregnancy.

DOI: 10.1038/sj.bdj.2010.606

SEPARATE UNIT IMPLANT RECONSTRUCTION

Full-mouth rehabilitation with single-tooth implant restorations. Overview and report of case

Markiewicz MR, Raina A *et al.* *NY State Dent J*; 5: 36–42

Does such an approach result in oral health gain?

Ask an edentulous patient what they understand by replacing missing teeth with dental implants and invariably they say each missing tooth is replaced by an implant. Yet when these authors carried out a literature search, they found no papers describing 'full-mouth rehabilitation with multiple single-tooth implants'. This case report, describes an edentulous patient who received 24 implants. Each implant was restored as a separate unit. This treatment was not without its complications. During the healing phase, a total of seven implants failed to integrate and were 'explanted'. Three other implants were mobile and 'boned together with composite resin.' No further detail was given as to the survival/success of these three implants. The authors assert, somewhat boldly, that such an approach is 'the next step in the evolution of the restorative management of the completely edentulous patient.'

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