

# 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.

## SAME APPOINTMENT PARTIAL DENTURE

### A technique to fabricate a customized interim removable partial denture

Zhang H, Lee R *et al.* *J Prosthet Dent* 2009; **102**: 187-190

#### Removable partial denture in 'only 30 to 60 minutes'

This technique uses tooth-coloured and pink base-plate, light-polymerising urethane dimethacrylate resin, therefore avoiding 'the unpleasantness and hazards of using methyl and butyl methacrylate monomer'. These products, together with a light-polymerising unit, are marketed under the Triad<sup>®</sup> Visible Light Curing System (Dentsply). The following method is used. A labial index is recorded of the tooth to be replaced. Either this is taken from a cast when the tooth was present, or by replacing the missing tooth with a denture tooth. Shade-matched resin is used to form the missing tooth and the pink-coloured material forms the base plate. Both are light-cured. The authors state that this technique, using the same materials, can also be carried out intraorally. Any undercuts must be blocked out. Both methods would appear to be more suited to replace single units.

DOI: 10.1038/sj.bdj.2009.1105

## MODERATE PERIODONTITIS

### Impact of different periodontitis case definitions on periodontal research

Costa FO, Guimarães AN *et al.* *J Oral Sci* 2009; **51**: 199-206

#### What then are the criteria in order to diagnose 'moderate periodontitis'?

This study, which is at the heart of dental epidemiology, confirms the obvious that both the diagnosis and prevalence of periodontitis depends on what criteria are used to define the condition. Periodontal data sets were collected from 340 subjects. The prevalence of the condition was then determined using six different 'case definitions'. These comprised combinations of different probing depths (PD), connective tissue attachment loss (CAL) and the number and tooth sites at which these were recorded. Depending on which definition was used, prevalence frequencies varied dramatically from 65.3%, to as few as 13.8% of subjects. The authors support the definition proposed by the CDC Periodontal Disease Surveillance Workgroup and the American Academy of Periodontology, that 'moderate periodontitis' can be diagnosed if two interproximal sites at different teeth demonstrate PD  $\geq 5$  mm or CAL  $\geq 4$  mm.

DOI: 10.1038/sj.bdj.2009.1106

## PERIODONTAL DISEASES

### Classification of periodontal diseases. The dilemma continues

Devi PV, Pradeep AR. *NY State Dent J* 2009; **June/July**: 30-34

#### The 1999 Classification of Periodontal Diseases is of 'limited value in practice'

The 1989 World Workshop Classification of Periodontal Diseases has, amongst other shortcomings, assigned inappropriate weight to the age of the patient. For example, how can a 21-year-old have a juvenile condition, when they demonstrate the incisor-first molar pattern of bone loss, characteristic of localised juvenile periodontitis? In addition, this classification does not have a gingival component, nor consider the relationship between diseases of the periodontal and endodontic tissues (combined periodontic-endodontic lesions). The 1999 Classification of Periodontal Diseases addressed these shortcomings but introduced others. It is illogical for an otherwise healthy 10-year-old, with local factors and generalised attachment loss to have chronic periodontitis. Also, there are no categories for smoking-associated periodontal diseases or for conditions of the peri-implant.

DOI: 10.1038/sj.bdj.2009.1107

## CEMENTATION OF CROWNS

### Retention of metal-ceramic crowns with contemporary dental cements

Johnson GH, Lepe X *et al.* *J Am Dent Assoc* 2009; **140**: 1125-1136.

#### '...all the cements we tested should retain crowns adequately...'

This paper reports the combined results of essentially three studies, using over 130 extracted teeth. Each tooth was prepared for a crown such that the preparation had a 20-degree taper and a height of 4 mm. For each sample, a high-noble metal-ceramic casting/computer-milled crown was constructed and cemented using one of a range of materials. The 'stress of dislodgment' was determined using an Instron universal testing machine. They reported that the powder-liquid resin-modified glass ionomer cements, some self-adhesive modified-resin cements and conventional resin cements 'provide additional retention'. However, it was difficult to interpret some of the data as a proportion of the 'specimens experienced tooth fracture before crown separation'. Interesting, the powder-liquid version of a cement tested, although less convenient to mix, was superior to the newer paste/paste version of the same cement.

DOI: 10.1038/sj.bdj.2009.1108