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.

SELF-LIGATING BRACKETS

Introduction

Birnie D, Harridine N Semin Orthodont 2008; 14: 1-4

Self-ligating brackets offer advantages over conventional systems. This paper comprises the introduction to a complete edition of the journal that is devoted entirely to self-ligating brackets. This overview is wide-ranging, insightful and clear to understand by all dentists. It states that despite the advantages of self-ligating brackets, specifically 1) 'consistent full bracket engagement' with the archwire, 2) 'reduced friction between the archwire and the bracket that allows more rapid tooth movement' and 3) more predictable control of tooth position, the 'speciality has been relatively slow to adopt this innovation'. In addition, there are purported more subtle advantages, such as increased anchorage, the use of lighter forces, less need for extraction, that 'raise questions of smile and facial esthetics' and tooth stability. DOI: 10.1038/sj.bdj.2008.904

TEMPOROMANDULAR DISORDERS

A follow-up study of subjective symptoms of temporomandibular disorders in patients who received acupuncture and/or interocclusal appliance therapy 18–20 years earlier

Bergström I, List T, et al. Acta Odontol Scand 2008; 66: 88-92

There are some patients who do not respond to treatment for temporomandibular disorders.

In the short term, a variety of different therapies are associated with the relief of symptoms for temporomandibular disorders (TMD). There is less data on long term outcomes. Sixty-five subjects, who had received treatment comprising acupuncture and/ or interocclusal appliance therapy in a specialist TMD clinic, 18-20 years earlier, were mailed by a questionnaire asking a range of questions about long-term improvements. 'A total loss of 31% of the original patient sample', as stated in the discussion, would appear to be the drop-out from this study. Of those that completed the questionnaire, 90% reported that they had experienced severe symptoms before treatment and this had decreased to 40% after 18-20 years. Despite the majority of patients reporting long lasting improvements, previous TMD patients who have received treatment still suffered more symptoms 20 years later than the overall population. DOI: 10.1038/sj.bdj.2008.905

GINGIVAL AESTHETICS

Gingival contour assessment: clinical parameters useful for esthetic diagnosis and treatment

Charreul S, Perez C et al. J Periodontol 2008; 79: 795-801

Confirmation that the gingival margins of upper canine teeth are more apically positioned than those for incisor teeth.

The aim of this study was to define the gingival contour of the upper anterior teeth, particularly with reference to the orientation of the patient's head in the horizontal plane. Previous studies have not controlled for this, as tilting the head forwards or backwards will influence this relationship. Based on power analysis *a priori*, maxillary impressions were recorded of 103 young adults and the casts were mounted on an articulator in the axis orbital plane. When the head was horizontal, the gingival zenith (maximum apical position of the free gingival margin) of canine teeth was apical to that of the central incisor. For the lateral incisor teeth, the gingival zenith was coronal, in over 80% of subjects, to a line between the gingival zeniths of the central incisor and canine teeth. The authors also reported a lack of symmetry in gingival morphology between the right and left sides. D0I: 10.1038/si.bdj.2008.906

CLEFT PALATES

Timing of palatal surgery and speech outcome

Chapman KL, Hardin-Jones MA, et al. Cleft Palate-Cran J 2008; 45: 297-308

The authors conclude that those children who are younger at the time of palatal closure have better articulation at 3 years of age. When palatoplasty is performed early, there is a trade-off between more favourable articulation but adverse effects on mid-facial growth. This study investigated whether or not those children who had palatal surgery carried out at a mean age of 11 months old had superior articulation at 3 years of age than those that received surgery later (mean age 15 months old). Speech production measures and listeners' ratings for a sample of speech were compared in two groups, each comprising 20 children, that were matched for age, gender, race and cleft type. The authors conclude that children who were younger at the time of palatal surgery had better speech outcomes than those who had surgery performed later. Nevertheless, it is stated in the discussion 'that more similarities (speech measures) were noted (between the groups) than dissimilarities ... '. DOI: 10.1038/sj.bdj.2008.907