

# 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.

## Gingival recession

Long-term stability of root coverage by coronally advanced flap procedures

Jepsen K, Stefanini M *et al.* *J Periodontol* 2017; **88**: 626–633

**Is it of any clinical relevance to use in combination with a coronally advanced flap a xenograft, when there is only an additional 0.3 mm root coverage?**

Furthermore, when the study (see *J Clin Periodontol* 2013;**40**: 82–89) was first published (which recruited more patients and in six centres) no differences were found 6 months after surgery. This present analysis that incorporated some of the earlier data, examined 18 patients in two of the centres at both 6 months and 3 years after surgery. The investigators state that ‘observation periods longer than 1 year are sparse.’ The studies used a split-mouth design comparing root coverage following either a coronally advanced flap or a coronally advanced flap with a xenogeneic collagen matrix of porcine origin (Geistlich Mucograft®). Recession levels were only 0.5 mm after 3 years compared with 3 mm before surgery with probing depth measurements remaining consistent at about 1 mm. Outcomes at 6 months predict those at 3 years.

DOI: 10.1038/sj.bdj.2017.667

## Peri-implantitis - corrosion

Increased levels of dissolved titanium are associated with peri-implantitis – a cross-sectional study

Safioti LM, Kotsakis GA *et al.* *J Periodontol* 2017; **88**: 436–442

**As this study implicates a role for corrosion in peri-implantitis, there may be a clear distinction between the aetiology of peri-implantitis and periodontitis.**

*Streptococcus mutans* has been isolated in high numbers around failing implants. It has been suggested that lactic acid produced by this bacterial species causes corrosion of the titanium dioxide layer. This layer is considered pivotal in affording biocompatibility. Unpinning this study therefore, is that corrosive agents such as lactic acid cause peri-implantitis. In this cross-sectional study, inductively coupled plasma mass spectrometry was used to quantify the levels of titanium in sub-mucosal plaque from 20 implants with peri-implantitis and 20 healthy implants. Implants with peri-implantitis harboured significantly higher mean levels of titanium compared with healthy implants ( $p = 0.033$ ). But despite there being a putative distinction between the cause of peri-implantitis and periodontitis, there is also commonality in that ‘*P. gingivalis* have(s) a high affinity for adsorption to those corroded titanium surfaces.’ It is suggested there should be an increased emphasis on maintaining the structural integrity of the titanium. For example, fluoride ‘can be detrimental to titanium leading to corrosion.’

DOI: 10.1038/sj.bdj.2017.669

## Abandon ‘classic occlusion-orientated theories’

Prosthetic planning in patients with temporomandibular disorders and/or bruxism: a systematic review

Manfredini D, Poggio CE. *J Prosthet Dent* 2017; **117**: 606–613

**It is some indictment, in that there were no studies with sufficient rigor to be included in this systematic review.**

The investigators asked the following pertinent questions: 1) has prosthetic reconstruction any role in the treatment of TMDs and/or bruxism compared with other treatment approaches, 2) can prosthetic treatment cause these perturbations, and 3) can prosthetics be safely carried out for those with TMDs and/or bruxism? Notwithstanding that no papers were of sufficient quality for inclusion in the systematic review, these authors provide some insightful comments. Prosthetic rehabilitation has no place in the treatment of those with TMDs and/or bruxism and indeed such treatment could exacerbate TMDs. Although oral appliances may facilitate reorganisation of muscle fibres and ‘a shift in the area of highest joint loading,’ irreversible reconstructive dentistry has no role in the treatment of TMDs and/or bruxism. Although there was no clear steer as to whether or not prosthetic reconstruction can be carried out in those patients who have TMDs and/or bruxism, the investigators did suggest it would be wise not to carry out ‘occlusal modifications (rehabilitation) that jeopardize the capacity for accommodation.’

DOI: 10.1038/sj.bdj.2017.668

## Oral health – holistic definition

A new definition for oral health developed by the FDI World Dental Federation opens the door to a universal definition of oral health

Glick M, Williams D *et al.* *J Public Health Dentist* 2017; **77**: 3–5

**‘...that will enable a conversation...’**

Such is considered the importance of this definition, this Editorial published in the *Journal of Public Health Dentistry*, also in full *JADA* 2016; **147**: 915–917 and indeed in this Journal (*Br Dent J* 2016; **221**: 792–793), merits summarising in this section.

Dental health professionals would argue that oral health is an essential component of overall health and well-being. Other stakeholders however, may not hold this view. To develop a coherent strategy (FDI’s Vision 2020 – *Int Dent J* 2012; **62**: 278–291) embracing ‘health policies, research, education, and reimbursement models’, a need was identified to come up with a common definition of oral health. This holistic description is hung on a framework that embraces 1) disease, 2) physiological, and 3) psychosocial function, but also recruits 4) drivers for oral health, 5) factors that influence how a person rates their oral health, and finally 4) overall health and wellbeing.

DOI: 10.1038/sj.bdj.2017.670