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.

NOVEL IMPLANT COATING: RISK-BENEFIT ANALYSIS

A bisphosphonate-coating improves the fixation of metal implants in human bone. A randomized trial of dental implants

Abtahi J, Tengvall P *et al. Bone* 2012; **50:** 1148–1151

'Locally released bisphosphonate from a coated implant will adhere to the nearest bone surface and stay there for a long time...'

The news section of this journal (*Br Dent J* 2012; **212:** 265) reported that implants treated with two different bisphosphonates demonstrated superior stability when compared with implants that had not been treated with bisphosphonates. In addition, a bisphosphonate-coating could increase the bone quality of the implant bed, and favour immediate loading. This study recruited 16 patients and used a split-mouth design. The observation period was six months. Apart from possible advantages, this paper also states risks associated with such an approach. For example, if the implant bed is infected, bone resorption and healing would be inhibited that could result in chronic osteomyelitis. The authors also sounded a note of caution as to possible systemic effect from such bisphosphonate coatings.

DOI: 10.1038/sj.bdj.2012.693

IMPLANTS: RISK-BENEFIT ANALYSIS

Dental implants in frail elderly adults: a benefit or a liability?

Ettinger RL. *Spec Care Dentist* 2012; **32:** 39–41

If an implant-borne fixed prosthesis cannot be maintained by effective home oral health care, it could be modified to a removable prosthesis/overdenture.

Dental implants have been shown to improve the quality of life. Yet an elderly person, often with enfeebled hands and sometimes dementia, may not be able to carry out optimum home oral healthcare. An approach would be to alter the implant-borne fixed prosthesis converting it to a removable prosthesis/overdenture and to cover the implant abutments with healing caps. This would allow effective oral and denture hygiene with such possibly being carried out by a carer. It is also sometimes all but impossible to identify components of a failing implant system used by the original treating dentist. It would be of considerable merit to issue to every patient who has received an implant with an 'implant passport' detailing the manufacturer and superstructure of that implant reconstruction.

DOI: 10.1038/sj.bdj.2012.694

BISPHOSPHONATES AND IMPLANTS

Association between oral bisphosphonate use and dental implant failure among middle-aged women

Yip JK, Borrell LN *et al. J Clin Periodontol* 2012; **39:** 408–414

Implant failure was almost three times more frequent in those women who had taken oral bisphosphonates.

This case-control study looked for associations between oral bisphosphonate therapy and implant failure. The investigators recruited over an 8-year period, 337 (114 test, 223 control) middle-aged female patients who had 1,181 implants placed in a dental hospital. Control patients were selected who had implants placed in the same year as those patients whose implant(s) had failed. After adjusting for confounders, 'the odds of oral bisphosphonate use was 2.69 (95% confidence interval [CI], 1.49-4.86) times higher in women for whom implants failed compared with those for whom implants did not fail.' It is stated that this study would support the use of a drug holiday. However, such a approach has to be balanced against 'the risk of progression of osteoporosis in the absence of oral bisphosphonate therapy.'

DOI: 10.1038/sj.bdj.2012.695

PERIODONTAL DISEASES

No association between *A. actinomycetemcomitans* or *P. gingivalis* and chronic or aggressive periodontitis diagnosis

Nibali L, D'Aiuto F *et al. Quintessence Int* 2012; **43:** 247–254

Is there is a distinction between chronic periodontitis and aggressive periodontitis?

Nested polymerase chain reaction was used to identify *A. actinomycetemcomitans* and *P. gingivalis* only, from subgingival microbiological samples. These were taken from the four deepest periodontal pockets in 267 consecutive patients with either chronic periodontitis or aggressive periodontitis. These periodontal diseases were categorised by 1) the age of patient, 2) family history, 3) probing depth measurements and 4) bone loss. There were no differences in the percentages of patients from whom these bacterial taxa were recovered. Nevertheless, based on these findings, it maybe be too simplistic to suggest that there is no distinction between chronic periodontitis and aggressive periodontitis. For example, in a recent review (*Br Dent J* 2012; **212:** 601-606) it was stated that 'Organisms with different 'names' could carry out equivalent roles...'.

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