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.

MAXILLOFACIAL/DENTAL TRAUMA

Dental trauma in patients with maxillofacial fractures

Zhou H-H, Ongodia D et al. Dental Traumatol 2013; 29: 285–290

Dental trauma in patients with single mandibular fractures

Zhou H-H, Ongodia D et al. Dental Traumatol 2013; 29: 291-296

Trauma from rigid objects or falling against hard surfaces result in tooth fractures as the forces fail to dissipate to supporting structures.

These two papers examine the same cohort. In addition, they are not grounded on distinct research questions and some areas of the discussions are repeated. Nevertheless, these papers were published in sequence in the same edition of the journal. See http://www.publicationethics.org/case/salami-publication for a recent Committee on Publication Ethics report on salami publication.

This retrospective study interrogated all maxillofacial factures registered at Wuhan University Hospital, China, over a ten-year period. A dental injury was reported in 41.8% of this group of 1,131 patients. There was an average of 4.7 teeth injured in each patient. Contrary to what the investigators suggest, the incidence of dental trauma was similar in both maxillary and mandibular teeth. When distinguishing the types of dental trauma in the anterior sextants, crown fracture was more common in the maxilla whereas luxation was more common in the mandible. When considering fractures of the maxilla only, there was a low risk of teeth injury (OR = 0.385, p <0.001) as a consequence of 'resiliency...of the pneumatization of sinus cavities'. In contrast, fractures of both the maxilla and mandible were associated with a high risk of tooth injury (OR = 1.780, p <0.001).

When examining data for single mandibular fractures only, dental injuries were most commonly associated with those fractures at the symphisis. For all mandibular fracture sites, tooth injuries invariably occurred adjacent to the bony fracture. The authors revisit the much vaunted guardsman's fracture when an impact to the chin results in fracture of the symphisis and bilateral condylar fractures. Then as a consequence of 'forceful closure of the jaws...typically crown and crown-root fractures in the upper premolar and molar region and especially the palatal cusp fractures.'

DOI: 10.1038/sj.bdj.2013.1209

'ORAL MYTH SERIES'

Urban legends series: oral manifestations of HIV infection

Patton LL, Ramirez-Amador V et al. Oral Dis 2013; 19: 533-550

'...lack of evidence that HIV-OLs (HIV oral lesions) may represent manifestations of IRIS' (immune reconstitution inflammatory syndrome).

Of the four questions asked by the authors in this narrative review, only two will be summarised in this abstract. It has been suggested that HIV-OLs such as oral candidiasis and oral hairy leukoplakia can be used as a straightforward screen for HIV infection. But those investigators who made such a claim were not blinded as to the patients' HIV status. The conclusion of Robinson made over a decade ago that 'HIV-OLs alone are poor predictors for HIV infection' has not changed. Of course, there are several laboratory tests for HIV infection with both high sensitivity and specificity. Different HAART regimens have reduced the frequency of HIV-OLs, although this may not apply to HPV-OLs. There is a lack of evidence that HIV-OLs may signal IRIS.

'PRO-OXIDATIVE CHEMOTHERAPY' OR UNCONTROLLED EFFECTS

Editorial commentary. The role of vitamin C (ascorbic acid) in the prevention and therapy of oral diseases

Sigusch BW. Arch Oral Biol 2013; 58: 905-906

As humans can neither store nor produce vitamin C, from 'the angle of prevention, a person should consume fresh fruit and vegetables'.

This commentary highlights some of the issues examined in a systematic review published in this edition of the journal (*Arch Oral Biol* 2013; **58**: 563–557). In the substantial paper, it was concluded that vitamin C is 'an effective cytotoxic agent against oral neoplastic cells with potentially no harming effects on normal cells.' There is the usual caveat that there are insufficient clinical trials. When considering vitamin C supplements, hypervitaminosis is unlikely as surplus quantities of vitamin C are excreted through the kidneys and the intestine for very high doses. But then the commentator cautions against supplements as these could 'lead to uncontrolled pro-oxidative effects.' Yet ascorbic acid at certain concentrations could exert a 'pro-oxidant associated cytotoxic effect on neoplastic cells'.

DOI: 10.1038/sj.bdj.2013.1211