

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.

HIV INFECTION

HIV infection and periodontal diseases: an overview of the post-HAART era

Mataftsi M, Skoura L *et al.* *Oral Dis* 2011; **17**: 13–25

The link between HIV infection and periodontal diseases is less than clear and more so with HAART.

Linear gingivitis erythema and other periodontal clinical observations have been associated with HIV infection. However, studies exploring these findings are ambiguous. For example, when studying the oral microflora of HIV-infected individuals with periodontal diseases, 1) some papers report there is an increased occurrence of putative periodontal pathogens, 2) others a decreased number, and 3) yet others identified opportunistic microbial species. Nevertheless, studies are cited that suggest periodontal diseases 'could act as a risk factor for HIV reactivation in infected individuals'. It may be premature to make inferences in 'the post-HAART era', because of lack of power in published studies. However, immune reconstitution inflammatory syndrome (IRIS) is a putative link between periodontal diseases and HAART. This is when an inflammatory condition (such as periodontal disease) can be exacerbated as a consequence of HAART.

DOI: 10.1038/sj.bdj.2011.701

POISONING CAUSED BY DENTURE ADHESIVES

Hyperzincemia from ingestion of denture adhesives

Tezvergil-Mutluy A, Carvalho RM *et al.* *J Prosthet Dent* 2010; **103**: 380–383

Hyperzincemia results in hypocupremia.

Denture adhesives are mixtures of lower alkyl vinyl ether-maleic acid and gums. Zinc salts are used 'to stabilize denture adhesives'. It has been estimated that the intake of zinc from denture adhesives can be '5–23 times the amount the FDA approves for Wilson's disease'. This is when the liver is unable to regulate copper levels. One treatment for Wilson's disease is the use of zinc acetate that blocks the absorption of copper from food. Analogous to this therefore, is that an excessive use of denture adhesive containing zinc causes copper deficiency. Hypocupremia can result in polyneuropathy and bone marrow suppression. Neuropathic pain can also occur in bariatric patients and in those with type 2 diabetes. Fixodent® denture adhesives contains zinc. Poligrip® products and fitty® denture adhesive are zinc-free.

DOI: 10.1038/sj.bdj.2011.702

GLOBAL HEALTH DIVIDE

Transmitted antiretroviral-resistant HIV: a coming anarchy?

M-J Milloy, Wood E. www.thelancet.com/infection 2011; **11**: 336–337

'a new wave of [antiretroviral] – resistant strains that pose a substantial threat to global public health is emerging'

There is a stark difference in the prevalence of antiretroviral (ART) resistant HIV between wealthy and poor nations. This is as a consequence of the use of increasingly potent antiretroviral regimens (combination ART) and more tolerable antiretroviral regimens in wealthy nations. In addition, baseline resistance testing is carried out in wealthy countries, 'to guide the choice of first-line antiretroviral therapy'. Accordingly, the combination ART is 'tailored to the viral genotype to ensure full activity'. Because this strategy is not used in poor nations, in Zambia for example, only three years after the widespread distribution of antiretroviral drug regimens, 6% of individuals were infected with drug resistant HIV. It is suggested therefore, that in areas without resistance testing, treatment regimens should include a ritonavir-boosted protease inhibitor.

DOI: 10.1038/sj.bdj.2011.703

TREATMENT AS PREVENTION BUT SUFFICIENT?

HIV-2 down, HIV-1 to go? Understanding the possibilities of treatment as prevention

Wathne Bruhn CA, Gilbert MT. www.thelancet.com/infection 2011; **11**: 260–261

'Given the right attention, a waning HIV-2 epidemic is hopefully a prelude to the fall of HIV-1.'

HIV-1 is the causative agent of HIV/AIDS in wealthy countries, whereas HIV-2 has lower infectivity and is confined largely to West Africa. It is argued that studies tracing the infectivity of HIV-2 infections could provide indicators as to the role that treatment *per se* would have in the prevention of HIV-1. For example, complex patterns have been observed in the prevalence of HIV-1 and HIV-2 during and after the Guinea-Bissau war of independence (1963–74). When considering HIV-2 infection only, a *R₀* value greater than 1 (when one infected person infects more than one other with resulting epidemic spread) can only be sustained with high-risk behaviour. The authors re-visit the strategy as to whether or not 'high-coverage antiretroviral treatment' could reduce incidence rates 'by lowering community viral loads'.

DOI: 10.1038/sj.bdj.2011.704