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## Good dental care

Sir, The dental treatment of patients with inherited bleeding disorders, for example haemophilia A & B as well as von Willebrand's disease, has always been a concern for dental surgeons. The importance of good dental care in this group of patients was recently highlighted in an article by Harrington<sup>1</sup>. The treatment of these patients was traditionally carried out by dental surgeons associated with the Haemophilia Centres. This has recently been questioned and the Scottish Oral Health Group along with the Scottish Haemophilia Directors have therefore suggested that many of these patients could have the majority of their dental care carried out by either the primary dental service or in general practice<sup>2 3</sup>.

We have been alerted by the UK Haemophilia Directors of the outcome of a risk assessment carried out by the Department of Health. The principal conclusion was that all recipients of UK sourced plasma-derived coagulation factor concentrates used in the period 1980-2001 should be regarded as being at risk of developing variant Creutzfeldt-Jakob disease (vCJD) for public health purposes. In addition, some patients have been identified as being at a particularly higher risk by virtue of the fact that they have received batches of product derived from plasma pools to which a donor who subsequently developed vCJD had contributed.

Risk assessments have been carried out by both the Department of Health<sup>4 5</sup> and the World Federation of Haemophilia<sup>6</sup>. It remains the case that no person with haemophilia has developed vCJD.

Farrugia suggests that the risk of prion transmission through the use of coagulation factor concentrates is purely theoretical and it would appear that, quite fortuitously, the plasma fractionation

process is capable of eliminating prions. In addition, the Department of Health working parties have concluded that routine dental treatment is unlikely to pose a cross-infection risk.

Their risk assessment concentrated on the potential for transmission following abrasion of the lingual tonsil. No published data are available on the frequency of tonsil abrasion or the risk of contaminated instruments accidentally abrading the tonsil of another patient. The Department of Health Study suggests that the risk of vCJD transmission following tonsil abrasion and endodontic treatment can be considered to be eliminated providing standard decontamination and sterilisation procedures are followed.

Routine dental surgery including minor oral surgery<sup>7</sup> has therefore been classified as a low risk procedure for the transmission of vCJD. This paper and the Department of Health Guidance suggest that wherever possible burs, matrix bands and endodontic files and reamers should be disposed of after use.

We would like to bring this information to your attention and advocate the continued dental treatment of this group of patients in the primary care or general dental practice setting. We are particularly anxious to avoid the stigmatisation of people with haemophilia, as happened in the 1980s with HIV.

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1. Harrington, B, Primary Dental care of Patients with Haemophilia. Treatment of Hemophilia Monograph Series (2004), World Federation of Hemophilia, Montreal, Canada
2. Brewer A K, Roebuck E M, Donachie, M et al. The dental management of adult patients with haemophilia and other congenital bleeding disorders. Haemophilia 2003; 9,673-9,677

3. The Dental Management of Adult Patients with Haemophilia and other Congenital Bleeding Disorders, <http://www.dundee.ac.uk/tuith/Static/info/haemophili a.htm>
4. Committee on Dangerous Pathogens (ACDP) and the Spongiform Encephalopathy Advisory Committee (SEAC). Transmissible spongiform encephalopathy agents: safe working and the prevention of infection. Department of Health, UK, June 2003.
5. Economics and Operational Research Division. Risk assessment for vCJD in dentistry. Department of Health, UK, July 2003.
6. Farrugia, A. variant Creutzfeldt-Jakob Disease and Hemophilia – Further guidance on assessing the risks of plasma-derived products for treating hemophilia. World Federation of Hemophilia task force on Transmissible Spongiform Encephalopathies, 2004.
7. Hamilton, K, Brewer, A and Smith, A. Dental treatment of a patient in the new 'at-risk' category for CJD. 2004 Journal for hospital infection, 184-185

## Dependant factors

Sir, in BDJ 2004, 197:62 the letter detailing hemorrhagic tendencies states that the Vitamin K dependant factors are factor II, factor V, factor VII, factor IX and factor X. Factor V is actually a non-vitamin K dependant cloning factor. It acts on both the intrinsic and extrinsic pathways as a cofactor in the activation of prothrombin to thrombin.

Vitamin K has a bifunctional role in the coagulation pathway. Specifically, the vitamin K dependant pro-coagulants are factors II, VII, IX and X. Proteins C and S are also vitamin K dependant, having a role in the regulation of anti-coagulation i.e. inhibition of the cloning process. Protein C degrades factors V and VIII in the presence of calcium while protein S acts synergistically with protein C. Despite this dual role, the overriding tendency of a deficiency in utilisable vitamin K is to cause an increased propensity to bleed. Warfarin is a commonly used oral anti-coagulant which is, in basic terms, a vitamin K antagonist.

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