Endodontic instruments could transmit vCJD, say scientists

Scientists could not rule out the risk of the human form of ‘mad cow disease’ being transmitted by endodontic instruments, it has emerged. Guidance issued by all four UK chief dental officers this spring said endodontic reamers and files should only be used once because of the risk of spreading variant Creutzfeld-Jakob Disease (vCJD) between patients.

But the move was criticised by dentists who said there was little evidence to show there was any danger in re-using the instruments. ‘We are appalled that once again the profession has suffered the hasty imposition of a measure for which the evidence was slim,’ said British Dental Association chief executive Peter Ward in a letter to members.

The Department of Health has now published the scientific research that led to the decision. A preliminary analysis by health protection experts found the ‘worst reasonable case scenario’ was that 150 patients a year could be infected by dentistry. There is a risk the disease could be spread via surgical instruments including those used in dentistry although there are no known cases of this happening.

The paper was compiled by Dr Peter Bennett and Dr Peter Grove who first presented their findings to the Spongiform Encephalopa thy Advisory Committee (SEAC) last year. It is based on a series of assumptions including that there may be people who carry the disease but do not develop symptoms. The research also assumed dental pulp could be infected with the disease and that vCJD survives on instruments after they have been disinfected.

It concludes there could be between 2.5 and 7.5 per cent chance of patients catching the disease from instruments previously used on an infected patient. The vCJD Incident Panel says patients must be informed if there is anything above a one per cent risk. The analysis suggests that if one in every 10,000 people carries the disease then 20 to 150 people could be infected each year through endodontic treatments such as root canal therapy.

The researchers said they could not rule out the possibility that dentistry could contribute to an epidemic. However, they stressed that there were many uncertainties and that some of the calculations they had made were ‘very crude’. The report says: ‘The risks considered here may be considerably smaller than as presented or simply not exist. On the other hand, the ‘reasonable worst case scenarios’ presented here are also fully consistent with the known facts’.

The paper concludes: ‘ Whatever may be the actual case, the risks outlined in this paper could be avoided by making the files and reamers used in endodontic dental surgery single use.’ A further assessment of the risks is now underway.

The 2006 paper—Dentistry and vCJD: The implications of a ‘carrier state’ for a self-sustaining epidemic due to endodontic dentistry—can be downloaded at the chief dental officer’s section of the DH website at www.dh.gov.uk.

Bullied DCPs trained to offer stop smoking advice

Dental professionals in Bolton are to be trained up to offer advice to smokers who come in for teeth check-ups. The training, which will mainly be given to dental nurses at NHS dental surgeries, will be paid for out of the new lower fee of £72, and see your registration fee for some groups.

‘There has previously been a first registration fee of £250 for the orthodontics specialist list and the oral surgery specialist list,’ said a spokeswoman. ‘Inclusion on the other 10 specialists lists has been free in the past, up until 2008 when the £230 fee will apply.’

The council said the new annual fees were needed to cover the costs of maintaining the lists and running a telephone and an email inquiry service for the many people looking for specialist dentists.

Application forms and more information about DCP registration can be found at www.gdc-uk.org. Alternatively phone 0207 887 3800 or email GDCRegistration@gdc-uk.org to request forms directly.

Chewing gums approved by US dentists

A range of sugar free chewing gums has been given the stamp of approval by US dentists because they can help fight tooth decay. The American Dental Association (ADA) Council on Scientific Affairs awarded its Seal of Acceptance to three products made by confectionery giant Wrigley.

The Orbit, Extra and Eclipse chewing gums were subject to a tough review process. Manufacturers who wish to be considered for the ADA Seal of Approval must submit information including objective data from laboratory and clinical studies and a full list of ingredients. The council looked at studies that showed chewing the gum for 20 minutes after meals helps increase saliva production.

Saliva helps wash away plaque acid and bacteria in minerals such as calcium, phosphate and fluoride known to strengthen tooth enamel and help prevent cavities. Other products that have gained the ADA Seal of Approval include toothbrushes, toothpastes, dental floss and mouth rinses.