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4 February 2005

Dear Colleague

Information for dentists about the management of patients with, or ‘at-risk’ of, Creutzfeldt-Jakob Disease (CJD) including variant CJD (vCJD)

The aim of this letter is to clarify the situation with respect to the Primary Dental Care of patients who have been diagnosed with CJD, or identified as ‘at-risk’ of CJD for public health purposes.

The clinical care – including dental care - of these patients, should not be compromised in any way. As for all patients, satisfactory standards of decontamination are required. Should dental treatment progress to head and neck surgery, special precautionary measures may need to be taken to reduce any possible transmission of CJD.

The possibility that CJD may be spread from patient to patient in healthcare settings arises from knowledge that the CJD agent can be detected in certain tissues, and that any infectivity transferred on instruments in the course of their use may not be entirely removed (nor inactivated) by normal decontamination processes.

Information about the appropriate management of these patients’ dental treatment is summarised below. The Annex (Annex A) attached to this letter provides supporting information and sources for further information.

KEY MESSAGES

Please ensure that:

- Patients with CJD, or identified as ‘at-risk’ of CJD for public health purposes, (or their relatives) are not refused routine dental treatment
- Satisfactory standards of decontamination are observed

- Information about patients who are 'at-risk' of CJD is included in any referrals for surgery, and recorded in your records.

Actions for all Primary Dental Carers

When treating a patient with CJD, or a patient who informs you that he/she has been identified as 'at-risk' of CJD, you should:

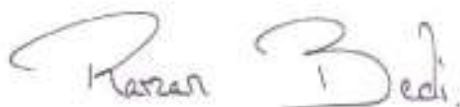
- **Ensure that satisfactory standards of decontamination are observed.** Under these conditions, routine dentistry is understood to be low-risk, and therefore no special infection control precautions are advised for the instruments used on symptomatic or 'at-risk' patients.

The recommendations of the British Dental Association¹ should be followed at all times, and for all patients.

Further information on infection control procedures specifically for patients with CJD or 'at-risk' of CJD is available in the guidance developed by the Advisory Committee on Dangerous Pathogens (ACDP) Transmissible Spongiform Encephalopathy (TSE) Working Group, *Transmissible spongiform encephalopathy agents: safe working and the prevention of infection*².

For a patient who informs you that he/she has been identified as 'at-risk' of CJD, you should also:

- **Ensure that information about the patient's 'at-risk' status is included in any referrals for surgery.** Head and neck surgery may involve contact with tissues of high or medium infectivity, for which special infection control precautions are advised. Please also record this information in your records for this patient.



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References

- 1 British Dental Association (February 2003) Advice sheet A12 *Infection Control in Dentistry* <http://www.bda-dentistry.org.uk/advice/docs/A12.pdf>
- 2 Transmissible spongiform encephalopathy agents: safe working and the prevention of infection. Guidance from the Advisory Committee on Dangerous Pathogens and the Spongiform Encephalopathy Advisory Committee. 1998, 2003 and 2004
<http://www.advisorybodies.doh.gov.uk/acdp/tseguidance/>

Further information on managements of patients with, or at risk of, CJD in Primary Dental Care

1. Categories of patients for whom this information applies

Details of the classification of patients with symptomatic CJD disease and patients who are considered 'at risk' of CJD while asymptomatic can be found in Table 4a of the guidance developed by the Advisory Committee on Dangerous Pathogens (ACDP) Transmissible Spongiform Encephalopathy (TSE) Working Group, *Transmissible spongiform encephalopathy agents: safe working and the prevention of infection*². This table is reproduced below.

Table 4a of TSE Infection Control Guidelines: Categorisation of patients by risk	
1. Symptomatic patients	<p>1.1 Patients who fulfil the diagnostic criteria for definite, probable or possible CJD or vCJD (see Annex B for diagnostic criteria).</p> <p>1.2 Patients with neurological disease of unknown aetiology who do not fit the criteria for possible CJD or vCJD, but where the diagnosis of CJD is being actively considered</p>
2. Asymptomatic patients at risk from familial forms of CJD linked to genetic mutations	<p>2.1 Individuals who have or have had two or more blood relatives affected by CJD or other prion disease, or a relative known to have a genetic mutation indicative of familial CJD.</p> <p>2.2 Individuals who have been shown by specific genetic testing to be at significant risk of developing CJD or other prion disease.</p>
3. Asymptomatic patients potentially at risk from iatrogenic exposure ^{##}	<p>3.1 Recipients of hormone derived from human pituitary glands, <i>e.g.</i> growth hormone, gonadotrophin.</p> <p>3.2 Individuals who have received a graft of <i>dura mater</i>. (People who underwent neurosurgical procedures or operations for a tumour or cyst of the spine before August 1992 may have received a graft of <i>dura mater</i>, and should be treated as <i>at risk</i>, unless evidence can be provided that <i>dura mater</i> was not used).</p> <p>3.3 Patients who have been contacted as potentially <i>at risk</i> because of exposure to instruments used on, or receipt of blood, plasma derivatives, organs or tissues donated by, a patient who went on to develop CJD or vCJD*.</p>

^{##} NB: A decision on the inclusion of corneal graft recipients in the "iatrogenic at risk" category is pending completion of a risk assessment.

* The CJD Incidents Panel, which gives advice to the local team on what action needs to be taken when a patient who is diagnosed as having CJD or vCJD underwent surgery or donated blood, organs or tissues before CJD/vCJD was identified, will identify contacts who are potentially at risk.

2. Dentistry in the TSE Infection Control Guidelines²

Part 4, page 16 of this guidance states that:

“The risks of transmission of infection from dental instruments are thought to be very low provided optimal standards of infection control and decontamination are maintained. General advice on the decontamination of dental instruments can be found in guidance prepared by the British Dental Association (BDA) on ‘Infection control in dentistry’². This document (known as the ‘A12’) is available from the BDA and can be accessed on their website at www.bda-dentistry.org.uk. Dental instruments used on patients defined in Table 4a can be handled in the same way as those used in any other low risk surgery i.e. these instruments can be reprocessed according to best practice and returned to use. Optimal reprocessing standards must be observed. Additionally, dentists are reminded that any instruments labelled by manufacturers as ‘single use’ should not be re-used under any circumstances.

“There is no reason why any of the categories of patients defined in Table 4a or their relatives should be refused routine dental treatment. They can be treated in the same way as any member of the general public.”

3. Tissues of high or medium infectivity for CJD and vCJD

In *sporadic* (and familial) CJD, significant infectivity is assumed to exist in the central nervous system, olfactory epithelium and eye.

In *variant* CJD, significant infectivity is assumed to exist in these same tissues and also in gastrointestinal lymphoid tissue and peripheral lymphoid tissue.

When patients ‘at-risk’ of CJD/vCJD undergo maxillio-facial surgery that may disrupt certain cranial nerves, or lymphoid tissues of the head and neck, special infection control precautions may need to be taken, as described in the TSE Infection Control Guidance².

4. Patients identified as ‘at-risk’ of CJD for public health purposes

There are several groups of patients who are identified as being at an additional risk of CJD (i.e. a risk over and above the risk in the general UK population that is around 1 in a million for sporadic CJD and is currently unknown for vCJD). These patients are considered ‘at-risk’ of CJD for public health purposes.

Over the past year, there has been a considerable increase in the number of patients classified as ‘at-risk’ of vCJD due to the notification of patients considered at risk due to receipt of UK blood products. This number may increase further if more blood donors develop vCJD.

Patients identified as 'at-risk' of CJD (including vCJD) for public health purposes are asked to take the following precautions to reduce any possible risk of spreading CJD:

- ♦ Not to donate blood, organs or tissues
- ♦ To inform healthcare staff before they undergo medical, surgical or dental treatment
- ♦ To inform their families in case they need emergency surgery in the future.

The health care professionals who notify these patients of their 'at-risk' status have been asked to arrange for the information to be recorded in patients' hospital medical records and/or primary care notes.

The responsibility for informing Primary Dental Carers lies with the patients themselves.

5. The risk of vCJD transmission during dentistry

In 2003 a study was undertaken to assess the risk of transmitting vCJD through routine, or 'high-street', dentistry³. It was concluded that any risk of vCJD transmission by routine dental procedures was 'low'. (There is evidence of vCJD infectivity in tonsillar tissue prior to the onset of symptoms, and tonsils are considered a tissue of 'medium-infectivity'. The possible risk due to abrasion of the tonsils (particularly the lingual tonsils) was therefore examined specifically: this risk appeared to be remote. The possibility of infectivity in other tissues (e.g. dental pulp) was also explored, and even for pessimistic scenarios, it was estimated that the risks of transmitting vCJD would be low.)

Many inputs to this risk assessment are subject to large ranges of uncertainty. It was noted that the findings might not apply if decontamination procedures (involving cleaning and autoclaving) used in high-street dentistry are less efficient than assumed.

As stated in the report:

"As for hospital surgery, the key consideration in minimising any risk of transmission is assuring the efficiency of instrument decontamination, even though current methods cannot remove such risks completely. In line with SEAC [Spongiform Encephalopathy Advisory Committee] advice, potential risks can be further reduced by introduction of more single-use instruments where appropriate, especially for difficult-to-clean items."

6. Advice from the CJD Incidents Panel

Despite the low estimated risk, one of the recommendations of the CJD Incidents Panel (the expert committee set up by the Chief Medical Officer in 2000 to advise hospitals, trusts and public health teams on how to manage incidents involving possible transmission of CJD between patients) is that patients inform their dentists of their 'at-risk' status. This is to enable Primary

Dental Carers to take the two appropriate actions of a) ensuring satisfactory standards of decontamination are observed, and b) ensuring information about patients' CJD status is included in any referrals for head and neck surgery.

7. Sources of further information

The TSE Infection Control Guidance² includes a review and summary of what is known about the distribution of CJD/vCJD infectivity in human (and animal) tissues.

Information relating specifically to patients identified as 'at-risk' of vCJD due to receipt of plasma products – including background information on vCJD, the assessment of risk, special public health precautions, infection control issues for these patients, and where to find further advice - is available at http://www.hpa.org.uk/infections/topics_az/cjd/blood_products.htm.

Information about the CJD Incidents Panel is available at http://www.hpa.org.uk/infections/topics_az/cjd/incidents_panel.htm

Other information about CJD, and further links, can be found at http://www.hpa.org.uk/infections/topics_az/cjd/menu.htm.

You may also contact your local infection control department for further advice.

8. References

- 1 British Dental Association (February 2003) Advice sheet A12 *Infection Control in Dentistry* <http://www.bda-dentistry.org.uk/advice/docs/A12.pdf>
- 2 Transmissible spongiform encephalopathy agents: safe working and the prevention of infection. Guidance from the Advisory Committee on Dangerous Pathogens and the Spongiform Encephalopathy Advisory Committee. 1998, 2003 and 2004 <http://www.advisorybodies.doh.gov.uk/acdp/tseguidance/>
- 3 Department of Health (July 2003) Risk Assessment for vCJD and Dentistry http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/CJD/CJDGeneralInformation/CJDGeneralArticle/fs/en?CONTENT_ID=4032409&chk=a%2BL/hP