

# A survey of cross infection control of CJD in the practice

*Cross infection control measures and the treatment of patients at risk of Creutzfeldt Jakob Disease in UK general dental practice* by J. Bagg, C. P. Sweeney, K. M. Roy, T. Sharp and A. Smith *Br Dent J* 2001; 191: 87-90

## Aims

To determine the suitability of key infection control measures currently employed in UK dental practice for delivery of dental care to patients at risk of prion diseases.

## Materials and methods

**Subjects:** Five hundred dental surgeons currently registered with the General Dental Council of the UK. **Data collection:** Structured postal questionnaire. **Analysis:** Frequencies, cross-tabulations and chi-squared analysis.

## Results

The valid response rate to the questionnaire was 69%. 33% of practices had no policy on general disinfection and sterilisation procedures. Only 10 of the 327 responding practices (3%) possessed a vacuum autoclave. 49% of dentists reported using the BDA medical history form but less than 25% asked the specific questions recommended by the BDA to identify patients at risk of iatrogenic or familial CJD. However, 63% of practitioners would refer such patients, if identified, to a secondary care facility. Of the 107 practitioners who were prepared to provide dental treatment, 75 (70%) would do so using routine infection control procedures.

## Comment

The above report by Professor Bagg and colleagues indicates that at least one group of sampled UK dentists had variable standards of infection control measures in their practices. In particular one third of the sampled group did not define policies for disinfection and sterilisation, and many did not maintain adequate details of the medical histories of their patients. It might thus be correct to assume that infection control in UK general dental practice is not optimal. However infection control is an ever-changing aspect of healthcare, and thus it is perhaps not too surprising to find that many dentists are unaware of relevant changes — particularly in these days of increasing information overload.

The spectrum of infectious disease in the UK population continues to widen<sup>1</sup> — reflecting changes in social (eg tuberculosis and Hepatitis A virus) and sexual lifestyles (eg Human immunodeficiency virus (HIV) and syphilis); increasing foreign travel (eg rabies), frequency of secondary immunodeficiency (eg drug-resistant HIV and herpes viruses) and lifespan (tuberculosis) — hence, dental healthcare staff have had to become aware of their potential significance, often only by means of publications such as that of Professor Bagg and co-workers.

While Bagg and co-workers found that many of the respondents did not regularly re-assess their patients medical histories it is

increasingly difficult to rely upon a patient's medical history as a pointer to possible infectious disease. Importantly 53% of new HIV infections in the UK in 2000 were the consequence of sex between men and women,<sup>2</sup> thus it may be difficult to determine if a patient is infected with HIV. Likewise many persons with HCV, HGV and TTV may not be aware of their carrier status, having no symptoms or signs of infectious disease.<sup>3,4</sup>

The study of Bagg suggests that not all respondents followed newly established guidelines for the cleaning, disinfection and sterilisation of instruments, in addition some practitioners were willing to provide dental healthcare to patients with known prion disease in the primary dental healthcare setting. Such lack of knowledge might reflect changing guidance from central sources, and possible the mixed messages that the BDA themselves sent out last year regarding the dental care of patients suspected of being infected with prions procedures, and also the guidance provided by one of the authors of the present paper.<sup>5</sup> In addition, as emphasised by Professor Bagg and colleagues, knowledge of aspects of prion disease pertinent to dental healthcare are still lacking, thus the relevant understanding of many of the dental profession will be variable.<sup>1</sup>

The findings of this study are not unsurprising, but are profoundly more encouraging than similar studies in the 1980s. It does

## Conclusions

Most of the dental practices surveyed were not actively seeking to identify patients at risk of prion diseases. In many cases, recommended procedures for providing safe dental care for such patients were not in place.

## In Brief

- Creutzfeldt Jakob Disease (CJD) is rare, but the resistance of prions to sterilisation procedures raises concerns in dental surgery.
- Many dental practitioners do not attempt to identify patients 'at risk' of CJD.
- Most UK general dental practices do not own vacuum autoclaves, and cannot undertake stringent decontamination of instruments used to treat patients 'at risk' of CJD.
- There are requirements for further research on prion infectivity in oral tissues and for continuing education on prion diseases for dental personnel.

however seem that there is a need to develop methods of succinctly informing dentists of relevant guidance and legislation.

The failure to maintain effective infection control in the healthcare setting places patients at risk. Such a failure by a dentist or professional allied to dentistry will rightly lead to their erasure from the *Dental Register*, and in some circumstances imprisonment. In view of the importance of infection control to patient care it might be advantageous if, in the future, the ability to demonstrate the *practice* of effective infection control is a prerequisite for continued General Dental Council registration.

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- 5 Smith A J, Martin M V. Managing patients with TSEs. *Br Dent J* 2000; 189: 62.