Airway management for tonsillectomy

Editor—We read with interest the article on airway management for tonsillectomy, which concluded that there is widespread non-compliance in the use of disposable anaesthetic instruments. The authors quite correctly make the point that currently non-disposable surgical instruments are used. Surely, prion transmission is less likely to occur via anaesthetic than surgical instruments which are intrinsically contaminated with tissue. The current RCoA guidelines recommend the use of single-use instruments for anaesthesia in tonsillectomy, although reusable instruments are used for the actual operation. We feel that, before enforcing guidelines that have not been complied with nationally, a full assessment of whether the risk of prion transmission is clinically significant is necessary.

In 2001, the Department of Health recommended that although there was no evidence of any patient being infected with variant Creutzfeldt–Jakob disease (CJD), precautions should be taken to reduce the ‘theoretical risk’. The use of single-use surgical instruments was abandoned after an increased risk of haemorrhage was identified by the National Prospective Tonsillectomy Audit (NPTA). Frosh recommended improved decontamination and the use of disposable surgical instruments, before the results of the NPTA. Improved decontamination should reduce the risk of CJD transmission and can be applied to both surgical and anaesthetic instruments. This also resolves the problem of substandard single-use instruments, as identified by the authors. It cannot be consistent to have one rule for surgeons and another rule for anaesthetists.

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Editor—I am grateful for Miss Roper and Dr Laha’s interest in our article. They ask for a ‘full assessment of whether the risk of prion transmission is clinically significant’. I understand that the Royal College of Anaesthetists and Association of Anaesthetists of Great Britain and Ireland (AAGBI) are both in the process of performing such an assessment, before updating the College advice and the AAGBI document ‘Infection and the Anaesthetist’.

They refer to the possibility of improved decontamination. This is pertinent to anaesthetic practice: several studies have shown that treatment with potassium permanganate 0.4–0.8% improves decontamination of both reusable silicone laryngeal masks and metal and rubber airway equipment. The stronger concentration appears to eliminate residual protein. This is a non-standard treatment but probably merits further exploration for its role in ‘risk reduction’.

The authors close their letter with the statement ‘It cannot be consistent to have one rule for surgeons and another rule for anaesthetists’. If, by that they imply that surgeons and anaesthetists should automatically either both use single-use equipment or both use reusable equipment, I do not agree. In November 2006, the National Institute for Health and Clinical Excellence (NICE) published their report ‘Patient safety and reduction of risk of transmission of CJD via interventional procedures’. This document makes much of risk–benefit analysis but also cost–benefit analysis. The conclusion that tonsillectomy does not require single-use surgical equipment (and that some neurosurgery does) appears to be based both on the intermediate risk of tonsillectomy and the high cost of single-use surgical equipment: in essence, it is mostly a cost–benefit decision. The document makes almost no mention of anaesthesia. Laryngoscopes are mentioned only in ‘passing’ and laryngeal masks are not mentioned at all. The document therefore makes no specific recommendations relevant to anaesthesia. For anaesthesia, the risks of both use of, and avoidance of, reusable equipment are different from surgery. However, the benefits and costs also differ. For instance, the costs of substituting in single-use equipment for anaesthesia are small compared with surgery. Therefore, the result of a cost–benefit analysis for anaesthesia cannot be inferred from the result of the surgical assessment and indeed the solution may be different. Unfortunately, this analysis was not performed for anaesthesia.

What is needed, I quite agree, is a clearer statement of what the risk of transmission of vCJD is as a result of anaesthetic practices. If this is available, it will allow the College and Association to arrive at clearer advice that is more likely to be accepted and followed.

Declaration of interest

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Anaesthesia for spinal surgery in children

Editor—Soundarajan and Cunliffe have produced an admirable summary of the conditions requiring spinal surgery in children and the major anaesthetic considerations surrounding this type of surgery. Any review of such a challenging and diverse subject matter must, by necessity, give only cursory attention to certain aspects of anaesthetic care. The authors briefly describe the use of spinal cord monitoring towards the end of their review. We would like to elaborate on the issues surrounding this type of surgery. As they quite rightly point out, it is difficult within the confines of a word limited review to sometimes put in as much information as you would like on a particular aspect of care. I hope we did their comments on our article. As they quite rightly point out, it is difficult within the confines of a word limited review to sometimes put in as much information as you would like on a particular aspect of care. I hope we did their comments on our article.

We would like to thank Drs Norton and Cave for drawing renewed attention to this important and developing area of paediatric anaesthetic care.

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In our experience, in children in particular, MEPs recorded using EMG needle electrodes elicited with multi-pulse transcranial electrical stimulation are poorly recorded and reproducible if the mean arterial pressure is <60 mm Hg. There are benefits. When monitoring is taking place, the neurophysiology technician will frequently record EEG, allowing the anaesthetist to determine depth of anaesthesia with increased accuracy. This is important in the face of the significant impact that depth of anaesthesia has on spinal cord monitoring. Although burst suppression allows for easy recording of SSEPs, it can lead to difficulty in obtaining TcMEPs due to loss of the oscillatory activity in the motor cortex which is crucial for generation of TcMEPs. Preserving neural function, especially in children, is of critical importance. In many instances, scoliosis surgery is at least semi-elective yet presents a significant risk of neural damage. Appropriate and comprehensive neuromonitoring is therefore crucial and the anaesthetic monitoring considerations are of major importance to the safe completion of surgery. As can be clearly seen from this description, this is an area which requires experience and communication. As spinal surgery increasingly becomes a team activity with the involvement of the surgeon, anaesthetist, and neurophysiologist, it is important that we recognize that we may need to alter our choice of anaesthetic in order to provide for improved patient safety. We would like to thank Soundarajan and Cunliffe for drawing renewed attention to this important and developing area of paediatric anaesthetic care.

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2 National Prospective Tonsillectomy Audit. British Association of Otolaryngologists, Head and Neck Surgeons Comparative Audit Group, Clinical Effectiveness Unit, Royal College of Surgeons of England. May 2005
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