DECONTAMINATION OF EQUIPMENT FOR GI ENDOSCOPY AND vCJD ISSUES – SOME GOOD NEWS AT LAST!

Since the last hard copy distribution of the BSG guidelines in 2003 there have been significant developments in decontamination practice, and revised guidance on endoscopy in patients at risk of variant CJD (vCJD). There is also good news in that endoscope manufacturers will shortly be in a position to offer centrally funded refurbishment of some endoscopes in quarantine. This ring-fenced funding will also make it less likely that “invasive” endoscopy (such as biopsy and diathermy) will be denied to patients at risk of vCJD (for example patients with haemophilia and related disorders).

Updated BSG Decontamination Guidelines

The 2008 guidelines will shortly be circulated in hard copy form to all BSG members and associate members and can also be downloaded from [http://www.bsg.org.uk/bsgdisp1.php?id=c7c0b1cf82751ba94159&h=1&sh=1&issue=]. These discuss for the first time the use of purpose built drying and storage chambers, the use of which may obviate the need for a full reprocessing cycle prior to each endoscopy list. The practice of ultrasonic cleaning of detachable valves in batches is now obsolete. There is also a statement that out of hours endoscopy should not be done unless there is an endoscopy assistant available who has been trained in decontamination practice.

The NHS Endoscopy Team has produced a table of standards which can form a checklist for auditing and inspecting decontamination facilities in endoscopy units ([http://www.grs.wales.nhs.uk/documents/decontamination.pdf](http://www.grs.wales.nhs.uk/documents/decontamination.pdf)).

There are in existence several sets of guidelines relevant to decontamination of endoscopes, not just gastrointestinal endoscopes but also other flexible endoscopes and rigid endoscopes and separate guidelines have emerged from the devolved assemblies. The Department of Health would like to work towards unifying decontamination guidelines under the auspices of a sub-committee of the Engineering and Science Advisory Committee that will have wide representation from different bodies (including the BSG Endoscopy Committee) and membership from the devolved assemblies. This sub-group will co-ordinate the drawing up of updated Health Technical Memoranda (HTM).

Updated Advice on Transmissible Spongiform Encephalopathy Agents

The Advisory Committee on Dangerous Pathogens TSE Working Group met with BSG representatives last year in order to agree revised advice on risk reduction during “invasive” endoscopy. Unfortunately the putative infecting agent in vCJD cannot be removed or destroyed by conventional sterilisation or decontamination methods. A group of patients at risk of vCJD has been identified. The number of individuals deemed to be at risk is in the order of 6500 (patients with haemophilia and related disorders account for the majority) and these individuals have been told of their risk and asked to take certain public health precautions to reduce the risk of spread to others, i.e. not to give blood, tissues or organs, and to inform healthcare staff who should follow guidelines for management of potentially contaminated instruments. The performance of an “invasive” procedure in an at risk patient could potentially contaminate the working channel of an endoscope with lymphoid tissue.

The resulting consensus document defines invasive procedures in more detail and gives the endoscopist practical advice on ways of avoiding contamination of the working channel with lymphoid tissue during endoscopic biopsy and some therapeutic procedures. It is anticipated that sheathed biopsy forceps will shortly become available to enable the safe performance of biopsy in at-risk individuals without risking contamination of the endoscope working channel.
Annex F of the ACDP TSE Working Group and the consensus document are available at http://www.advisorybodies.doh.gov.uk/acdp/tseguidance/index.htm. Also included here is Annex J which relates to pre-assessment of patients about to undergo surgery and endoscopy. Staff admitting patients for endoscopy should ask all patients, “Have you ever been notified that you are at increased risk of CJD/vCJD for public health purposes?” If the answer is yes, the appropriate precautions in Annex F and the consensus document should be taken. The admitting healthcare professional will be asked to briefly scan the case notes for any evidence of undiagnosed neurological illness and to document any evidence of obvious unexplained neurological disturbance noted during the pre-assessment interview. In such circumstances advice may need to be sought from a physician and/or neurologist before elective endoscopy and/or the procedure rescheduled to allow special precautions such as sheathed biopsy.

Central Funding for Endoscope Refurbishment

Hitherto the ACDP/TSE advice, and that from the CJD Incidents Panel, has been that the performance of an invasive procedure on an at-risk patient necessitates the quarantining of an endoscope because no guarantee can be given that any decontamination process will destroy or remove the putative infective agent.

I am pleased to report that we have been able to negotiate some central funding from the Department of Health which will enable some quarantined endoscopes to be refurbished and returned to use. We understand proportionate funding will be available from the devolved administrations also. The three leading endoscope manufacturer/distributor companies have undertaken to replace the tip and working channel from endoscopes that have been used for the performance of invasive endoscopy in patients at risk. Excluded from this refurbishment process are (a) some older endoscopes (as it may not be cost effective); (b) endoscopes that have been deemed by the distributors to have been kept in sub-optimal quarantine conditions; (c) endoscopes sent to the instrument archive at HPA Porton Down for research purposes; (d) endoscopes used for the performance of invasive endoscopy in patients with definite or probable vCJD or CJD. Units serving Comprehensive Care Haemophilia Centres will be given preference for this centrally funded refurbishment process and this will be widened later this year to embrace all units with quarantined endoscopes. Some may prefer to keep dedicated endoscopes for use in the same at risk-patients requiring repeat procedures. It is hoped that further central funding streams will be identified for this refurbishment process in years to come.

Conclusions

A lot of work has gone into trying to reach consensus in endoscope decontamination practice and in risk avoidance. Although the group of patients at-risk for vCJD has expanded considerably, the range of endoscopic procedures that risk contaminating the working channel has reduced, and more sheathed accessories (such as biopsy forceps) should become available shortly. There is practical advice to the endoscopist in ways of avoiding the potential risk of contaminating the working channel with lymphoid tissue during invasive procedures such as PEG. I would like to acknowledge the help from Professors Don Jeffries and Mike Bramble.

It is recommended that the performance of potentially invasive endoscopy for at-risk individuals should be restricted to one or two experienced endoscopists in each Trust who are willing to keep themselves updated in national guidance on vCJD, risk avoidance and endoscope quarantining. Whilst the number of endoscopes in quarantine will undoubtedly increase with the expansion of the at-risk group, the central funding for endoscope refurbishment should enable the majority of the quarantined endoscopes to be returned to use. It is requested that endoscopists inform their hospital Infection Control groups of these guidance updates.

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