

Summary of guidelines for Decontaminating ENT Fibreoptic scopes

Introduction

Philip Jones (ENT), Tass Malik (ENT) with assistance from Dr. Geoffrey Ridgway (Consulting Microbiologist) and Grant Bates (ENT) have written guidelines for decontaminating scopes, which are up-to-date as of November 2005. The full guidelines are published in the ENT.UK Membership Handbook and on the ENT.UK website.

Currently the 'Tristel wipe system' has not received approval from the MHRA (Medicines and Healthcare Regulatory Agency), although negotiations between the company and the MHRA continue. Some concerns have also been raised concerning sheaths by the Spongiform Encephalopathy Advisory Committee (SEAC), but currently their use is recommended provided the scope undergoes full decontamination at the end of each day.

Decontamination is a combination of processes including washing, inspection and disinfection and/or sterilization used to render an instrument safe for handling and re-use.

Flexible ENT scopes do not possess an accessory channel and do not usually penetrate mucosal barriers so high level decontamination, rather than sterilisation, is usually adequate. Flexible scopes, as well as some rigid scopes, are delicate heat-labile instruments and are thus not amenable to autoclave sterilisation. Non-autoclavable rigid scopes should be decontaminated in the same way as flexible scopes but ENT departments are advised to buy autoclavable rigid scopes wherever possible for future use.

NB: Some voice clinic rigid scopes are still not autoclavable.

Accountability

Patient's details, time and date of each use, names of the user, the person responsible for decontamination and the method of decontamination should be recorded in a logbook and the details of the scope used (serial number) should be recorded in the patient's notes.

The ENT department should set up a training programme with their Department of Infection Control. There should be an up-to-date list of individuals who are trained to use scopes as well as those responsible for decontamination.

Consideration should be given within each department for the best method of decontaminating a scope when used in the different areas of ENT practice, e.g. theatre, out-patients, the wards, peripheral clinics etc.

Decontamination of scopes

This is a multi-stage procedure and should be carried out between each patient (unless sheaths are used). It is important to adhere to the scope manufacturer's regulations. Regular inspections are required to check for leaks, cracks and surface irregularities (visual and formal leak testing). Decontamination includes cleaning, chemical disinfection, rinsing and drying and finally storage.

N.B. Scopes should be decontaminated at the end and beginning of each clinic or period of clinical use if the scope was last decontaminated three or more hours earlier.

1. Cleaning

The scope is manually cleaned and rinsed using running water and an enzymatic detergent as soon as the scope is removed from the patient.

2. High level chemical disinfection

Suitable liquids, as of October 2005, include electrolysed saline (Sterilox), chlorine dioxide (Tristel), peracetic acid (Steris, NuCidex, Dopsidex, Perasafe, Gigasept). Advantages and disadvantages of these various agents are discussed in detail in the full guideline document.

3. Rinsing and drying the fiberoptic scope

Irritant decontaminating agents must be washed from the scope before re-use using sterile water. Finally the scope should be wiped with a disposable alcohol impregnated cloth to dry it.

4. Storage

Clean scopes should be transported and stored in marked sterile bags which have been appropriately labelled.

Cross infection is likely to be extremely rare but the effectiveness of the decontamination process should be audited at least once a year by ENT departments and there should be random checks on the process by infection control staff.

Disposable sheaths as an alternative to disinfection

It is acceptable to use a disposable sheath to prevent contamination. Staff using such sheaths for fiberoptic scopes should be trained in their use and safe removal. After removal check the sheath and decontaminate the scope if there is any sign of failure. Sheaths allow a rapid turnover but have a significant cost. Scopes must still go through a complete cycle before use if they have not been decontaminated within the last three hours, and must go through a complete cycle at the end of every session of use.

THE FUTURE

Manufacturers are currently developing small benchtop machines suitable for decontamination of ENT scopes which can be used in out-patients and which will have a short cycle time.

Grant Bates