Subject: High efficiency particulate air (HEPA) filtered cabinets to dry and store flexible endoscopes

Additional Information

Advisory No.  CHRISP - 01/2008

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Authorities  Centre for Healthcare Related Infection Surveillance and Prevention (CHRISP)

Distribution List  General Managers - Area Health Services
                  District Managers - Queensland Health
                  Executive Directors of Medical Services - Queensland Health
                  Directors of Nursing - Queensland Health
                  Health Services Purchasing and Logistics (HSP&L) - Queensland Health
                  Bulk Purchase Team - Queensland Health
                  Materials Management, Shared Services - Queensland Health
                  Sterilising Nursing Network - Queensland Health
                  Gastroenterological Nurses College of Australia Inc (GENCA)
                  Sterilising Nursing Network

Additional Distribution:  Directors of Endoscopy Units - Queensland Health
                        Endoscopy Unit NUMs – Queensland Health
                        Infection Control Practitioners - Queensland Health
                        Patient Safety Officers – Queensland Health

Action Required By:  District Managers
                     Directors of Nursing
                     Directors of Endoscopy Units
                     Endoscopy Unit NUMs

Recommendations  Duodenoscopes and bronchoscopes must continue to be reprocessed before use according to the GESA/GENCA guidelines.

The storage life for gastrosopes and colonoscopes may be extended to 72 hours provided strict criteria are observed. This means that gastrosopes and colonoscopes do not have to be reprocessed before use, on the day of use, if they have been reprocessed within the last 72 hours, as long as:

1. The gastrosopes and colonoscopes are reprocessed strictly in accordance with GESA/GENCA guidelines. This must include a final alcohol flush followed by a meticulous drying process before storage.

2. The quality assurance processes recommended by GESA/GENCA are in place, particularly:

   2.1. The rinse water is bacteria free and automated endoscope reprocessors (AER) and post-filtered water are regularly monitored

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2.2. Bacteriological surveillance of endoscopes is carried out according to guidelines.

2.3. Evidence from the above surveillance indicates that the processes in place for cleaning, reprocessing and storing of endoscopes does not support growth of organisms in the channels.

3. The gastroscopes and colonoscopes are stored in either a:

3.1. Clean, dry, well ventilated, dedicated storage cupboard, which permits full length hanging on appropriate support structures;

OR

3.2. Therapeutic Goods Administration (TGA) approved, purpose built drying cabinet which provides continuous passage of HEPA filtered air through all channels and with quality mechanisms which alarm if airflow does not occur or the temperature of the perfused air falls outside of the operating parameters. It is not necessary for the cabinet to have UV lighting.

4. There is a record available to subsequent users of the stored gastroscopes and colonoscopes indicating the date and time they were last reprocessed.

If it is not possible to meet the above criteria the storage life of gastroscopes and colonoscopes must not be extended and they should be reprocessed before use, on the day of use.

If it is possible to meet the above criteria, initial bacteriological testing must be performed on colonoscopes and gastroscopes after storage for 72 hours to confirm and document that existing scope care supports the extension of their storage life.

Suggested Actions

1. Ensure all endoscopy reprocessing units strictly adhere to the GESA/GENCA reprocessing guidelines prior to extending storage life of gastroscopes and colonoscopes.


3. Direct all manufacturers and/or distributors to Health Services Purchasing & Logistics (HSP&L).

What happened?

- CHRISP was notified that HEPA drying and storage cabinets were being purchased by Queensland Health facilities with a view to using them as an alternative to the requirement of the GESA/GENCA guidelines that all flexible endoscopes be reprocessed before use, on the day of use.

- After reviewing the literature and the manufacturer’s evidence to support their claims the cabinets could be used in this manner, CHRISP concluded that there was insufficient evidence to support this claim.

- CHRISP contacted HSP&L and Materials Managers and indicated that the HEPA drying and storage cabinets should not be purchased by facilities with a view to using them in contravention of the GESA/GENCA guidelines.

- GENCA was informed of CHRISP’s view and facilitated a trial in the Princess Alexandra Hospital (PAH) Endoscopy Unit to microbiologically compare flexible endoscopes stored in a HEPA cabinet with those stored as usual in drying cupboards.

- Preliminary results of this trial and another similar trial reported in J.GENCA, informed an editorial in J.GENCA about the use of HEPA
Preliminary results of the PAH trial were presented to a meeting of the Infection Control Expert Advisory Group (ICEAG) which was attended by a GENCA representative and in light of those results there was agreement that gastroscopes and colonoscopes did not have to be reprocessed before use, on the day of use, if they had been reprocessed within the last 72 hours, as long as they were reprocessed and stored appropriately.

Why did it happen?
- Manufacturers and/or distributors were promoting the use of HEPA cabinets for endoscope storage time which was outside of the GESA/GENCA guidelines.

How could it be prevented?
- When products are being promoted by manufacturers and/or distributors as being able to be used in contravention of existing guidelines, confirmation of this advice should be sought from an independent party.

Acknowledgements
- Health Services Purchasing and Logistics
- Nurse Unit Manager and staff of PAH Endoscopy Unit
- Director and staff of PAH Microbiology Laboratory

References

Contact Us:
Centre for Healthcare Related Infection Surveillance and Prevention
Website: http://www.health.qld.gov.au/chrisp/contact_us.asp

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