POSITION STATEMENT

Care of the Equipment and Associated Environment during Endoscopic Retrograde Cholangio-Pancreatography (E.R.C.P.)

Purpose

Prevention of nosocomial contamination of equipment during E.R.C.P.

Preamble

E.R.C.P. has been associated with serious procedure induced infections.

Factors known to have contributed to infection during E.R.C.P. are –
1. Inadequate cleaning of the duodenoscope, particularly the elevator channel.(1)
2. Inadequate disinfection of the duodenoscope and all channels including the elevator channel (1)
3. Failure to adequately dry the duodenoscope channels prior to storage.(1)
4. Inadequate cleaning and disinfection of reusable endoscopic accessories.
5. Reuse of single use endoscopic accessory equipment.(1)
6. Contamination of the water bottle and the use of non sterile water in the water bottle.(1, 2)
7. Contamination of Automated Endoscope Reprocessing (AER) machines.

Position

The Gastroenterological Nurses College of Australia (GENCA) believes that the nature and complexity of the procedure and equipment used for E.R.C.P. warrants specific precautions to reduce the risk of procedurally transmitted infections.

These include -

1. During the manual cleaning process, particular attention must be paid to the elevator channel and recesses surrounding the elevator bridge mechanism of the duodenoscope. The cleaning adaptors recommended by the manufacturer for the particular model of duodenoscope must be used. Failure to adequately rinse each channel following disinfection can lead to contamination of the duodenoscope therefore bacteria free water must be used. The final rinse of the channels after high level disinfection via an automated reprocessor must pass through filters ranging from 10 microns to 0.2 micron absolute final filter.
2. Preparation of the endoscope by high level disinfection/sterilisation should occur as close as possible to the time of the procedure within a 12 hour time frame to minimise the risk of microbial growth within or on the instrument.

3. Research indicates that it is impossible to validate the cleaning process of reusable accessory equipment, therefore it is recommended that single use accessories be used for E.R.C.P.

4. Water bottles and tubing should be steam sterilized at least daily. (2) Sterile water shall be used. (2) While there is no evidence to date suggesting more frequent change of the water bottle some organizations espouse more frequent exchange of water bottles and tubing. (2).

5. Safe work practices encompassing the prevention of contamination of sterile accessories should be implemented. Accessories should be received in an aseptic manner. Consideration should be given to the working space available so as to avoid contamination during the procedure.

6. Procedural working surfaces should be covered with sterile trolley covers.

7. The procedural nurse shall wear a sterile gown and sterile gloves to receive accessory items in an aseptic manner. Gowns and gloves should be changed at the end of each procedure.

8. All soiled equipment should be placed in a designated area away from clean equipment to avoid cross contamination.

9. The practice of radiation safety is defined and regulated by state and local radiology departments. The nurse and personnel present during radiation exposure during the procedure of ERCP must be provided with appropriate protective and monitoring devices. The patient should be protected by controlling the length of exposure and covering body areas.

References

**Additional references**


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