The importance of protected transport of flexible medical endoscopes and the relevance to patient cross infection risks.

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Background and Aims: Flexible medical endoscopes are an important and integral part of disease diagnosis and treatment, but are also sources of patient cross infection. The aim of this paper is to raise awareness to the risks of unprotected transport and patient safety impact.

Conclusion: In summary, protected transport is an often forgotten step in the prevention of equipment and staff contamination.

Endoscope reprocessing is a collection of crucial and sometimes complex steps that should culminate in an endoscope that is free from microbial contamination and be rendered patient safe.

These steps are inextricably linked together and each one of them depends on the success of the preceding step to ensure that the whole process from start to finish is completely successful.

Although there is much emphasis on the cleaning and disinfection phases of the process, each step is just as important as any other. Any compromise or breach of the process can potentially re-contaminate the endoscope and render it unsafe for use.

One area of reprocessing that is often overlooked is protected transport from the procedure room to the manual cleaning area and then post disinfection, from the AER to the drying/storage area and then ultimately to the procedure room for the next examination.

Protection from potential handling damage, and the risk of contaminating staff members or other medical devices is important when transporting dirty endoscopes from the procedure room to the cleaning area. The ability to pre-condition the dirty endoscope and maintain the level of moisture in an enclosed sealed contained can enhance the manual cleaning process especially when there is delayed time until the cleaning process takes place.

This type of situation occurs during emergency procedures or those that are conducted over weekends when normal reprocessing facilities are unavailable. Depending on the geographical location, endoscopes need to be manually cleaned within a one to three-hour time frame. If this time is exceeded, an extended soak period of up to ten hours may be implemented, which effectively removes that endoscope from the inventory of available devices. This can and does impact patient throughput.

Although there is a lack of scientific data to support the need for covered transportation methods between the procedure room and manual cleaning area, other departmental practices (SPD) include the use of quarantine containers to ensure that both staff and other devices are not cross contaminated by soiled medical devices. Common sense tells us that the same requirements exist for the transport and protection of soiled endoscopes.

Post reprocessing protection is even more important as breaches in handling of disinfected endoscopes can (and do) result in patient infection risk increases. This is particularly true where manual cleaning and high-level disinfection take place in close proximity to each other.

Aerosolized particles of contamination can be present in the atmosphere and can be deposited on and in disinfected endoscopes that are removed from AER's and are part of post reprocessing drying. Inappropriate glove changes are also a prime reason for contamination after disinfection particularly when opening lids and covers of AER's to remove endoscopes. At the very least, there should be clear steps demonstrating when gloves need to be changed at each part of the process.

Transportation to the drying or storage cabinets also needs to conducted in sealed containers to minimize the risk of recontamination, as is the transport from the drying and storage area to the procedure room. Appropriate changes of gloves are also just as important, as one incorrect handling of a disinfected endoscope with dirty gloves can compromise the entire process.

If nothing else, remember that "The level of decontamination is only as good as the weakest link in the chain".