





| LEAK TEST AND MANUAL CLEANING OF OLYMPUS GASTROSCOPE<br>AND COLONOSCOPE POST PROCEDURE |  |
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| Document Change History   |                         |
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| 5.8 Change Wassenburg Endohigh Detergent from 80 to 75 mls<br><br>5.4: Change in the process regarding transport to include a rigid transport container.<br><br>5.19 Includes the cleaning of this container. | To reflect new process. |

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## 1.0 Purpose

To outline the procedure for leak testing and manually cleaning of Olympus Gastroscope and Colonoscope post procedure. Ensure all RIMD sets (including flexible scopes) are traced through the decontamination process to the service user and ensuring RIMD are checked and reprocessed in accordance with the manufacturers instructions.

## 2.0 Definition of Terms

*Endoscopes:* Flexible bronchoscopes, gastroscopes, colonoscopes

*Cleaning:* A process using friction, detergent and water to remove soil, including organic debris.


*High-level disinfection:* A process that destroys all micro-organisms with the exception of high numbers of bacterial spores. High-level disinfectants have the capability of inactivating the hepatitis B virus, HIV and Mycobacterium tuberculosis.

## 3.0 Responsibility

It is the responsibility of each member of staff leak testing and manually cleaning the ***endoscope to follow the correct procedure.***

## 4.0 Guideline


- 4.1 Endoscopes are leak tested and manually cleaned immediately after use.
- 4.2 Endoscopes are checked, as applicable, for defects, damage, functionality and cleanliness throughout the decontamination process, while in storage and before use on the patient. In addition, expiry time and date is checked while in storage and before use on the patient.
- 4.3 Failure to properly leak test and manually clean and perform high-level disinfection of endoscopic equipment after each examination can compromise patient safety.
- 4.4 To minimise the risk of transmitting diseases from one patient to another after each examination, the endoscope must undergo thorough manual cleaning immediately after use followed by high-level disinfection.
- 4.5 If the endoscope is not cleaned meticulously, effective disinfection may not be possible.
- 4.6 A set of disposable air / water, suction and biopsy valves ref 100305 are used for all Olympus endoscopes.
- 4.7 The endoscope must be cleaned thoroughly before disinfection to remove micro-organisms or organic material that could reduce the efficacy of disinfection.
- 4.8 The endoscope must be rinsed internally (with octopus rinsing device) and externally after manual cleaning and before being placed in the automated washer disinfectant. Rinse water must be visibly clean. If not, repeat manual wash.

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- 4.9 A routine water sample is taken from each endoscope monthly for microbiological examination in the laboratory, in addition, if the scope is used on a patient with an I.C. alert follow SOP "Management of Endoscope Used on patient with known or suspected Infection control Alert" A water sample from the biopsy, suction and auxiliary water channels (if present) and / or dry swab sample from the external surface of the scope must be taken after decontamination if indicated in the above SOP. Scope is then set aside or quarantined until results return from Microbiology Laboratory, if applicable

## 5.0 Procedure

- 5.1 Personal protective equipment must be worn as outlined in SOP Attire to be worn when cleaning endoscopes."
- 5.2 Use single use cleaning brushes ref. no. BW – 412 T
- 5.3 At bedside place distal end of endoscope into diluted Wassenburg endohigh cleaner solution (1 . 25mls : 250mls H<sub>2</sub>O), attach suction cleaning tubing MH 856 to biopsy channel outlet place weighted end of tubing into bowl also, attach channel cleaning adaptor MH 948 to air /water cylinder, aspirate for 10 secs .
- 5.4 Ensure protective camera cap is attached, if applicable, take endoscope to sink in the designated rigid scope container lined with the sterile tray liner and covered with the red plastic cover and lid applied along with its bowl and Olympus cleaning accessories set. Transport to washroom in the trolley marked Contaminated Scopes. If there is a delay in taking the endoscope to the sink, wipe down externally with a detergent soaked cloth.
- 5.5 Discard disposable Olympus accessory valves in clinical waste bag
- 5.6 Perform dry leak test i.e. follow (Step 1) attach Olympus leak tester to scope (Step 2 and 3) turn on switch 2, then switch 3 on leak tester box, then (step 4) push leak tester prong into leak tester box, check for any leaks (continuous bubbles), observe endoscope while angulating tip in all 4 directions.
- 5.7 Fill sink with 15 litres water (sink is marked at this level), observe endoscope while angulating tip. A few bubbles may occur, this is normal but if there is a continuous stream of bubbles from same spot, this indicates a leak. Drain water immediately from sink, follow steps 4, 3, 2, 1 to release pressure from tester, externally wipe down endoscope with detergent solution as in 5.3 ,dry brush internal channels as per step 5.12 send to Keymed Ireland for repair as per SOP " Sending Olympus, Pentax or Wolf endoscope for repair " .
- 5.8 If there is no leak, disconnect leak tester out of the water. Never remove or connect leak tester under water as this can cause water leakage into endoscope. Proceed to cleaning by adding 75mls (press detergent pump once) to 15 litres of water already in sink.
- 5.9 Fill separate 1 litre bowls, one with detergent solution, the other with clean water and leave beside sink.
- 5.10 Use 20ml syringe to flush at least 90mls of detergent solution through auxiliary water channel (if present )

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- 5.11 Use detergent soaked J cloth to clean all external parts of endoscope starting from least contaminated part (camera insert section) and ending at distal tip of endoscope.
- 5.12 Use small end of disposable cleaning brush, firstly down through biopsy channel, secondly, the brush is inserted at 90 degree angle down the proximal air channel, then at 45 degree angle via the same opening, a minimum of 3 times each channel cleaning brush each time before drawing it back through the channel. Change water and detergent solution if necessary. Do not use excessive force. Do not squeeze or bend endoscope.
- 5.13 Never insert brush in opposite (distal) end.
- 5.14 Use large end of disposable cleaning brush to clean external larger channel openings
- 5.15 Use the diagram card attach to the "Octopus" cleaning accessory to connect it to the endoscope. Place the filter end of the tubing into the 1 litre bowl of detergent solution. Use 20 ml syringe to aspirate and subsequently inject a minimum 90 mls through both octopus channels. Place filter end of tubing into second bowl of clean rinse water and aspirate and inject 90mls clean water through both octopus channels to internally rinse endoscope. If there will be a delay in loading the endoscope into the washer / disinfectant inject a minimum 60mls air through the 2 octopus channels
- 5.16 Place Olympus bowl and cleaning accessories with signed checklist into HSSD collection box in sluice room
- 5.17 Empty sink, rinse endoscope externally in clean water ( water should run clear )
- 5.18 Load endoscope into washer / disinfectant as per " SOP" Loading endoscope into Wassenburg Washer /Disinfectant "
- 5.19 Place patient addressograph into manual cleaning record book. Record scope barcode on the addressograph, tick and sign relevant sections of manually cleaning record

The transport container is then cleaned. This cleaning process involves manually washing the designated rigid scope container with water and Brial detergent. Then dried and wiped with Azowipe and placed in the transport trolley marked for Contaminated Scopes.

## 6.0 References

HSE Standards and Recommended Practices for Endoscope Reprocessing Units 2012  
Version 2.2

Olympus endoscope reprocessing manual, 2014.

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