POLICY:	**Reprocessing of Flexible Endoscope in the event the Automatic Endoscope Reprocessor is not functioning**
Program Area:	**Medical Device Reprocessing**
Section:	**General**
Reference Number:	**CLI.5510.PL.006**
Approved by:	**Regional Lead – Acute Care & Chief Nursing Officer**
Date:	Issued 2024/Sept/23 Revised

PURPOSE:

To outline the proper reprocessing of a flexible Endoscope in the event the Automatic Endoscope Reprocessor (AER) is not functioning to ensure patient safety.

BOARD POLICY REFERENCE:

Executive Limitation (EL-02) Treatment of Clients
Executive Limitation (EL-07) Corporate Risk

POLICY:

Reprocessing Flexible Endoscopes are done in a manner that minimizes patient risk and prevents healthcare associated transmission of micro-organisms.

DEFINITIONS:

Minimal Effective Concentration (MEC) – the minimal concentration of a disinfectant that must be used to achieve high level disinfection.

Personal Protective Equipment (PPE) – gloves, water resistant gowns, masks, protective eyewear used according to risk of exposure to prevent transmission of micro-organisms.

High Level Disinfectant (HLD) – used for the destruction of all micro-organisms except for high levels of bacterial spores.

Automatic Endoscope Reprocessor (AER) – machine designed for the purpose of cleaning and disinfecting endoscopes and/or accessories.

PROCEDURE:

Cleaning

1. Perform hand hygiene and don appropriate PPE. PPE includes: impervious gown, gloves, eye protection and mask.
2. Following pre-cleaning in the Procedure Room, soiled flexible endoscope are manually cleaned within 1 hour. When manual cleaning is delayed for greater than 1 hour, or if excessively soiled, follow the manufacturer's instructions for "presoak for excessive bleeding and/or delayed reprocessing". Follow policy for CLI.5510.PL.003 Pre-soak of Flexible Endoscopes Following Excessive Bleeding and/or Delayed Reprocessing.

3. Attach the leak tester and turn on power source. Depress the pin located inside the connector cap of the leak tester and listen to confirm air is emitted. Attach the connector cap to the venting connector by pushing it on and rotating clockwise.
4. With leak tester attached, immerse the endoscope into a clean sink of fresh water and observe for 1 minute while deflecting the distal bending section of the endoscope by turning the angulation control knobs UP/DOWN and RIGHT/LEFT. Observe that there is no continuous series of air bubbles coming from the interior of the scope that indicates a leak. Remove the endoscope from water with the leak tester attached. Turn the power source off and detach the leak tester from the power source.
5. Dispose single use valves.
6. Add the enzymatic detergent to the water in the sink at the recommended concentration and using a lint free cloth to clean, wipe the entire endoscope starting at the control end and wiping to the distal end of the endoscope.
7. Straighten the bending section of the endoscope. Insert brush at 45-degree angle into the suction cylinder and biopsy channel and push it through using short strokes. After each passage, rinse the brush in the detergent solution, removing any debris visible on the brush with a minimum of 3 passes. Use short channel cleaning brush to clean both the suction port and instrument channel port. Repeat brushing 3 times.
8. Attach the suction cleaning adaptor to the instrument channel port. Attach the suction tube from the suction pump to the suction connector on the scope. Immerse the distal end of the insertion section and the weighted end of the cleaning adaptor in the enzymatic detergent solution. Cover the suction cylinder of the endoscope with your glove finger and aspirate a minimum 300ml of the water and enzymatic detergent through the endoscope. Turn the suction off and detach the suction tube and suction adaptor.
9. Remove the endoscope from the enzymatic detergent sink and place in a sink filled with clean water for rinsing. Rinse entire scope with an adequate amount of water to remove all detergent. The use of tap water for rinsing after cleaning is acceptable.
10. Follow manufacturers' instructions for using an automated flushing system such as Endo-flush, Scope Buddy or Instru-Flush.
11. Remove from water and wipe the exterior surfaces of the endoscope using a soft lint-free disposable cloth to remove excess moisture. Use instrument air if available or syringe to dry inner channels.
12. Use the Channel Check testing pack to check lumens for residual contaminants following manufacturers' instructions for use.

High Level Disinfection (HLD):

1. Prepare RESERT HLD in appropriate container with lid.
2. Test RESERT HLD temperature (20 deg. C. – 24 deg. C.)
3. Test RESERT MEC with Chemical Indicator Test Strips.
4. Completely immerse endoscope into RESERT HLD.
5. Attach channel plug, auxiliary water tube and injection tube to endoscope.
6. Using a 30ml. syringe, inject RESERT into all endoscope channels.
7. Detach channel plug, auxiliary water tube and injection tube from endoscope.
8. Using a timer, soak endoscope in RESERT for 5 minutes.
9. Re-attach tubing and purge all channels with air to remove RESERT HLD.
10. Place endoscope into a clean container, rinse with RO or sterile water if available using a 30ml syringe to inject 90ml water into channels. Change water after soaking endoscope for 1 minute each time x 3 times to rinse both the inner channels and outer body of the scope.
11. Using a 30ml syringe and connecting tubing, purge all channels with air to remove water.
12. Using a 30ml syringe and connecting tubing, inject 70% alcohol into all channels.

13. Using 30ml syringe, purge all channels with 90ml of air to promote drying and follow with compressed air (less than 20 psi), if available, until channels are dry.

Storage and Care:

1. Attach label to endoscope to indicate it has been cleaned and disinfected and requiring reprocessing in AER.
2. Caps, valves and other detachable components remain disconnected during storage. Store in a HEPA filtered storage cabinet in a manner that minimizes contamination or damage. Do not allow endoscope to coil, touch the sides or the bottom of the cabinet while hanging.
3. Reprocess the endoscope in an AER when it is repaired and functioning.

Documentation:

- Complete CLI.5510.PL.006.FORM.01 Manual Endoscope Reprocessing Form.
- Document the date and time on the CLI.5510.FORM.01 Endoscope Log that the AER is not functioning, and the scope has been cleaned and HLD in MDR. Dept.
- When the AER is repaired and functioning, reprocess the endoscope in the AER and complete the a new CLI.5510.FORM.01 Endoscope Log.

SUPPORTING DOCUMENTS:

CLI.5510.PL.006.FORM.01	Manual Endoscope Reprocessing Form
CLI.5510.FORM.01	Endoscope Log Form

REFERENCES:

CSA Decontamination of Reusable Medical Devices Z314:23 section12 January 2023

Olympus Reprocessing Manual Instructions, Evis Exera ll,GIF/CF/PCF Type 180 and 190 Series
January,15,2021