CARE, CLEANING & STERILIZATION OF NON-CONDUCTIVE INSTRUMENTS

Rinsing and cleaning needs to happen immediately after use for decontamination. Adherent particles may resist cleaning or cause staining.

Instruments must be completely cleaned of all foreign matter with specific care focused on channels and moving parts in contact with body tissue and fluids. Precise cleaning is key prior to sterilization.

1. Follow the "General Maintenance Guidelines" for suitable handling of instruments.
2. Completely soak instruments in cleaning agent.
3. Avoid use of eroding cleaning agents (i.e. bleach).
4. Never clean electrosurgical and laser coated instruments in a glass bead sterilizer.
5. To dismantle specula, remove the thumbnut holding the yoke/upper assembly to lower blade.
6. Remove tubing and expel according to hospital protocol if disposable smoke tubing is used.
7. Use warm water and a mild soap.
8. Do not use a harsh cleaning solution.
9. Do not soak coated instruments in CIDEX or other caustic cold sterilization solutions.
10. Cleaning agents and rinses at or near neutral pH (7.0) are recommended.
11. A soft bristle brush (similar to a toothbrush) should be used.
12. Round bristle brushes are recommended to clean inside channels of smoke tubes, if present.
13. Immerse and extensively rinse the instruments in warm tap water to remove cleaning agents.
14. An enzymatic cleaner should be used to remove protein deposits on the instruments. Follow enzymatic manufacturer's instructions and rinse thoroughly.
15. A final rinse of distilled water is recommended.
16. Inspect the instrument coating for nicks or cuts; verify that no metal is visible underneath the coating.
17. Handle with care. Hard contact with other instruments, hard surfaces or sharp objects can damage the non-conductive coating.
18. Delicate hooks or tenacula should receive special attention to avoid breakage
19. Do not place coated instruments in an ultrasonic cleaner.

TO CLEAN:

1. Follow the "General Maintenance Guidelines" for proper management of instruments.
2. Rinse and/or presoak.
3. Clean manually using a mild soap and warm water with soft bristle brushes.
4. Clean the inside channel of the smoke evacuation tube using a round bristle brush with warm water once again.
5. Rinse.
6. An enzymatic cleaner should be used to remove protein deposits on the instrument. Follow enzymatic manufacturer's instructions.
7. Rinse.
8. Dry with clean cloth or gauze and compressed air.
9. Inspect.
10. Prepare for storage and/or sterilization.

NOTE: Make sure to dry instruments completely with compressed air (including the inside of channels) and/or a dry oven (maximum temperature 280° F).

STERILIZATION WITH AN APPROVED LIQUID CHEMICAL STERILANT:

1. Instruments must be cleaned extensively following the above steps before cold sterilization. Cold soak solutions with a 2% glutaraldehyde solution may be used for sterilizing the instruments. Instruments are to be fully submerged. For sterilization times, follow the manufacturer's instructions. Soak and rinse thoroughly in two separate, sterile, deionized water baths.
2. Reassembly: Reassemble the yoke to the remainder of the speculum assembly using the thumbnut removed previously.
3. Storage: It is recommended that instruments be stored dry in a moisture free area. The instruments should be stored individually in their shipping cartons or in a protective tray with partitions. If stored in drawers, protect with cloth or gauze.

AUTOCLAVE STERILIZATION:

1. Contact of plastic to bare metal should be avoided.
2. Items should be precisely cleaned of all foreign matter before sterilization following the above steps.
3. Follow the manufacturer's instructions for operation and loading of steam autoclave. There must be direct steam exposure to all surfaces of the instruments being sterilized.
4. Autoclave temperatures should not exceed 280° F (137° C) pressures should not exceed 32 psi (2.2 atmospheres).
5. Instruments should be sterilized in their "Open" position.
6. Gravity Displacement Cycles
   a. 20-30 minutes at 270°-275° F
   b. 30 minutes at 250° F
7. Pre-Vacuum Cycles
   a. 3-4 minutes at 270°-275° F

ETHYLENE OXIDE STERILIZATION:

1. Items shall be completely cleared of all foreign matter prior to sterilization following the above steps.
2. Instruments should be sterilized in their "Open" positions.
3. Follow the manufacturer's instructions for operation and loading. Direct exposure to all surfaces of the instruments being sterilized is necessary.
4. Recommended Ethylened Oxide Cycle:
   a. Temperature – 125°-130° F
   b. 50° RH (pre-humidity – 60 minutes -0-10 minutes
   c. Pre Vacuum – 24" Hg +/- 2" Hg
   d. Gas Pressure – 6-8 psig (550-660 mg L)
   e. Exposure Time – 4 hours -0-0.25 hours
   f. Post Vacuum – 24" Hg 2x +/- 2" Hg
   g. Aeration – 12 -0/+1 hours at 120º F

WARNING:

ALWAYS CHECK INSTRUMENTS BEFORE AND AFTER STERILIZATION TO ENSURE THAT NON-CONDUCTIVE COATING IS UNIFORM: METAL SHOULD NOT BE VISIBLE UNDERNEATH THE COATING. CONTACT BETWEEN EXPOSED METAL AND CHARGED ELECTRODE MAY CAUSE BURN TO PATIENT AND/OR PHYSICIAN.