

LOYOLA UNIVERSITY - Guidelines in Processing Micro Instruments

#1 IN ROOM HANDWASHING

- Scrub nurse cleans each instrument with lint free instrument wipe and sterile distilled water.
- Any instrument found to be defective during operative procedure is removed and replaced by charge nurse.
- All instruments placed in case, which is then closed.
- Instruments taken to OR Processing.

#2 DECONTAMINATION ROOM

- Entire case put in Ultrasonic Cleaner for a period of 3 to 5 minutes, using appropriate Ultrasonic Detergent.
- From Ultrasonic, entire case is taken to rinsing-dryer for a 15-minute cycle. (Deionized water Preferred).
- Upon removal from dryer, immerse in milk bath for recommended period by product vendor i.e. 30 seconds.
- Let case and contents drain for 5 minutes.

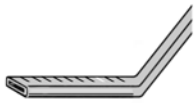
BIPOLAR FORCEPS

- Wash off gross blood with warm water.
- Clean tips with instrument polish and brush.
- Rinse copiously with warm deionized or distilled water.
- Dry instrument thoroughly.

#3 CLEAN PROCESSING ROOM

- Wipe off excess fluid and lubricant from outside surface of protective case.
- Re-examine and assess each instrument for function, quality and cleanliness. Use a magnifying glass for surface edges.
- Place internal indicator in peel pack (do not seal) and place on top of the instruments. Reseal the case.
- Double wrap in muslin and steam sterilize at 250⁰, 30 minutes at 15# pressure.

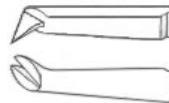
THE FOLLOWING ILLUSTRATIONS REPRESENT TIPS COMMONLY SEEN IN MICRO SURGICAL INSTRUMENTS FOR OPHTHALMOLOGY.



Cannulated Tips



Lens Manipulators



Tissue Forceps



Micro Scissors

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Care and Handling of Microsurgical Instruments**

**LOYOLA UNIVERSITY - GUIDELINES FOR THE
CARE & HANDLING OF MICROSURGICAL INSTRUMENTS**

To our valued customers:

This outline provides answers to your questions on why staining, pitting or rusting can develop on stainless steel instruments; there are some basic points for the care and handling of surgical instruments which will extend the life of the instrument, eliminate staining or corrosion and lower the cost in use. If applicable, please note in the right hand columns whether or not these procedures are being followed.

The basic points are as follows:

	YES	NO
1. Instruments should be rinsed as soon as possible after use to remove blood, serum and saline. Do not use a sponge basin as any residue from normal saline solution can cause corrosion to develop over a period of time.	<input type="checkbox"/>	<input type="checkbox"/>
2. Instruments should be thoroughly dried after cleaning and before wrapping or storing, as moisture left in the box or serrations can cause rust or corrosion to develop.	<input type="checkbox"/>	<input type="checkbox"/>
3. Do not leave instruments in cold sterilization soak solution for extended periods as these solutions tend to be corrosive (after cold sterilization, rinse the instruments in distilled water or deionized water and dry thoroughly.	<input type="checkbox"/>	<input type="checkbox"/>
4. If using cold sterilization technique, change the solution according to directions, as prolonged use will cause the solution to become corrosive.	<input type="checkbox"/>	<input type="checkbox"/>
5. Do not use caustic cleaners or any cleaner except those specified for cleaning surgical instruments.	<input type="checkbox"/>	<input type="checkbox"/>
6. Do not clean instruments with steel wool or scouring powder. If cleaning by hand, use specific instrument cleaner or neutral detergent soap and a soft brush (rinse with deionized or distilled water. Ultrasonic Cleaning with the proper solution is the preferred method).	<input type="checkbox"/>	<input type="checkbox"/>
7. Check your autoclave, Iron, Sodium, Calcium, Magnesium or Copper in your water can cause spotting, staining or corrosion to occur. In hard water areas, clean the lime deposits from steam lines periodically or use distilled or deionized water for your autoclave. Install a steam filter if possible. It will remove most dirt, rust and pipe scale.	<input type="checkbox"/>	<input type="checkbox"/>
8. Make sure your muslin wraps (if applicable) are rinsed sufficiently (6 to 8 times) by the laundry to remove all chlorine as any residue can cause staining or corrosion during autoclaving.	<input type="checkbox"/>	<input type="checkbox"/>
9. Do not leave instruments in the following solutions for extended periods as corrosion can result. a. Aluminum, Barium, Calcium, Ferrous or Stannous Chloride Solutions. b. Phenol, Lysol, or Iodine. c. Dakin's Solution or Zephirin. d. Any acid, Mercury or Potassium Solution.	<input type="checkbox"/>	<input type="checkbox"/>
10. Do not sterilize stainless steel instruments with chrome plated instruments if possible, as any break in the surface of the chrome plate will allow an electrolytic action to develop between the dissimilar metals causing pitting and/or a rusty appearance to develop.	<input type="checkbox"/>	<input type="checkbox"/>
11. Preheat instruments in auto clave before allowing steam to enter, if possible, to prevent an excessive amount of condensation forming on the surface of the instruments.	<input type="checkbox"/>	<input type="checkbox"/>
12. Do not open the autoclave too quickly after the sterilization cycle as excessive condensation will develop on the surface of instruments (crack the autoclave door to allow drying before opening fully.	<input type="checkbox"/>	<input type="checkbox"/>

If you follow the above guidelines, your instruments should remain rust, spot and stain free. I hope this will answer any questions you might have on this topic. If not, please feel free to call B. Graczyk, Inc. for further information.