

SURGERY INSTRUMENTS & STERILIZATION

Anne Arundel Veterinary Emergency Clinic



OVERVIEW

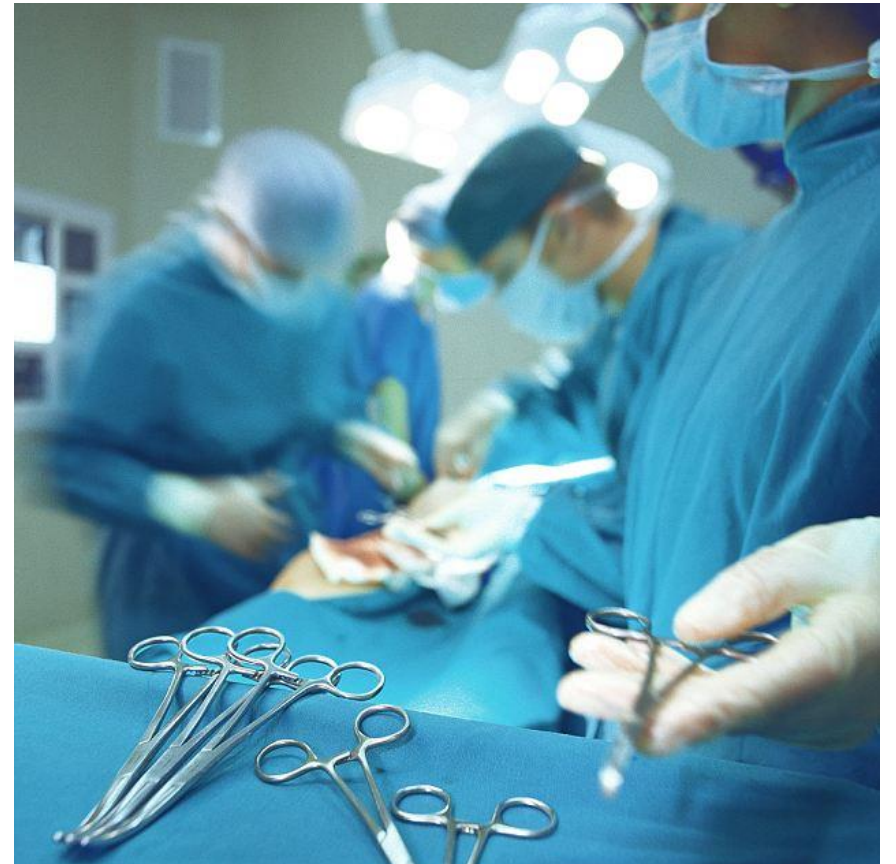
- Instrument Identification
- Cleaning & Maintenance
- Laceration and Surgery Packs
- Ophthalmic Pack
- Cold Sterile
- Wrapping Packs & Pouches
- Autoclave Steam Sterilization



Instrument Types

Surgical instruments are designed specifically to assist doctors in carrying out specific tasks during an operation.

- Cutting & Dissecting
- Clamping & Occluding
- Retracting and Exposing
- Grasping and Holding



Why sterilize?

It Prevents:

- The spread of diseases
- The initial growth of diseases
- Needing to repeat surgeries
- Infection at the surgical site



Enemies of Instruments

Most instruments are made from durable stainless steel. Regardless of its name it definitely stains. Knowing these enemies of instruments can prevent staining, pitting and marking of instruments.

Surgical Residues – Blood, Pus & Secretions cannot be left to dry on instruments for longer than 30 minutes. Especially if it makes it into the autoclave steam where it will stain the instruments.

Tap Water – Containing high concentrations of minerals which contain chlorine which can leave fine deposits (water spots). Make sure to dry all instruments before putting into the autoclave.

Cleansers – Wash instrument with neutral pH soap designed for surgical instruments. Dish soap, bleach, iodine, surgeon's hand scrub and chlorhexidine based soaps can cause spotting and corrosion in the long run.

Cleaning Instruments

Cleaning should be performed within 10 minutes from the end of the procedure. If you are unable to do so, at least let instruments soak until you can begin.

Gross Debris Removal – Use an instrument cleaning brush to remove debris, tissue and blood. Open every instrument to clean within the jaws serrations, teeth and hinges. Tubes should be flushed until you do not see anymore blood or tissue.

Ultrasonic Cleaner – Turn the machine on 10-15 minutes before using it to de-gas. This removes bubbles and gas. Instruments should sit in an ultrasonic cleaner with ultrasonic cleaner for 15 minutes to allow high frequency sound waves to break up microscopic debris. Instruments should be left open when placed inside. When complete rinse the instruments. Make sure water level is appropriately filled to the line for every use.



Lubrication

Lubrication should be performed after instruments are dried. Imagine putting lotion on your skin while it's still dripping wet. Proper lubrication keeps the instruments from rubbing, scraping and sticking.

- **Lubricate joints, hinges, boxes, ratchets and screw joints**
- **Using lubricant spray is ideal over baths because they contain less bacteria since they do not sit out all day**
- **Lubricants should never be rinsed off. They should however be patted dry. Allowing lubricants to air dry may leave water spots.**



Sterile Pouches

Self sealing pouches include internal and external steam sterilization indicators. Please put in a sterile strip indicator on top of the inside pouch regardless.

- **Must be double wrapped**
- **Lap sponges folded accordion style**
- **2 stacks of 15 for Gauze**
- **Paper drapes accordion style**
- **Only a moderate handful of Q-tips**



Steam Autoclave Use

Steam autoclave is used to prevent infection between procedures (45-60 minutes)

- **Heavy instruments on the bottom**
- **Do not stack paper or pouches**
- **Lay pouches on their sides**
- **Do not over stuff autoclave**
- **Check water level prior to starting**

