Care of ophthalmic surgical instruments

Handling and safety

Sharps
- Protect the tips of all sharp instruments with silicone or rubber tubing.
- Intravenous infusion tubing or tubing from ‘butterfly’ intravenous needles may be used.

Remember!
- Never re-sheath a disposable needle
- Always use artery forceps to remove a blade from a Bard Parker handle
- Provide a gallipot on the theatre trolley to collect used needles and blades
- Do not touch the tips of any instrument
- Never throw an instrument down

Needles
- Discard used needles immediately after use.
- Place in a receptacle used only for this purpose.
- Do not over-fill.
- Preferably use small receptacles and dispose of them daily.
- Seal and incinerate the receptacle when almost full.

Remember!
- Silicone or rubber protectors must be used on sharp instruments when in storage or transit.

Maintenance

Cleaning
- Ideally, instruments must be cleaned immediately after surgery (within 20 minutes). If this is not possible, place them in a pH neutral enzymatic solution or at the very least cover them with a moistened towel to prevent blood, tissue, and saline from drying and caking on the instruments.
- Use a soft toothbrush and warm soapy water to thoroughly clean each instrument individually and in its open position.
- Water should be warm, not hot. Hot water causes blood to clot (coagulate) faster, making it harder to remove.
- Distilled water is preferable since regular water can leave mineral deposits.

Lubricating hinged instruments after cleaning
- Use a lubricant immediately after cleaning hinged instruments to prevent rust and stiff joints.
- If you are using water-based lubricants, dip instruments and allow the lubricant to drain off (pictured). Do not leave to soak, and never put cannulae in lubricant.
- If you are using sewing-machine oil, use a 2 ml syringe and a 21-gauge needle to draw up the oil and a 25-gauge needle to apply oil to the joints. Use a piece of gauze to carefully wipe away any surplus oil.
- If any hinged instruments are stored, you must lubricate them at least once a week.

Drying
- Thoroughly dry instruments before storing or sterilising them. Dry gauze (used cautiously) or a hairdryer may be used.

Inspecting instruments
- Inspect instruments for alignment and sharpness under a good light and magnification.
- Inspect cannulae to ensure they are not obstructed by flushing through with clean, warm water.

Storage, transport, and security

Shelves
- Glass shelves in a lockable cupboard provide for secure storage and easy checking.
- Never pile instruments on top of each other.
- A well-ventilated room is recommended.

Trays
- Each individual slot in the tray holds a single instrument.
- Instruments must not touch each other.
- The tray can be used for storage, transportation, and during some sterilisation procedures.

Cases
- Cases may be of metal or plastic and contain a protective silicone mat.
- Cases can be used for storage, transportation, and during some sterilisation procedures.

Rolls
- Rolls, made of strong fabric, are inexpensive.
- Each pocket holds a single instrument.
- Secure the roll with ribbon or cord, not elastic, as elastic can degrade in heat.
- Use rolls only for storage and transportation of instruments, not for any other purpose.