

Some hints on Surgical Instrument care & sterilisation

Cleaning

Immediately after use clean instruments intended for repeated use and for repeated sterilisation. This not only preserves the instrument but also protects those persons responsible for transporting and cleaning the used objects.

Don't allow any contaminant (e.g. blood or tissue fats) to dry on instruments before sterilisation or cleaning.

- ✓ Wash the instruments in lukewarm water or a detergent solution; body fluid coagulates in hot water & gelatinise in cold water.
- ✓ Use a stiff-bristled nylon brush to clean them but don't scrub; it can damage surface layer (The final/surface layer on an instrument is a special layer to protect the instrument). Pay particular attention to serrations, hinges, ratchets and teeth.
- ✓ Don't use harsh abrasives and cleaning agents; these will abrade the metal surface and lead to corrosion.
- ✓ Rinse the instruments thoroughly in hot running water and dry them thoroughly while they are still hot.
- ✓ Clean and wipe ophthalmic and other delicate instruments using cotton fabric. Pick these instruments up by their handles and don't allow their points to touch each other or other objects. These instruments should not be handled by untrained staff.
- ✓ Use lint-free, soft textile cloths, paper cloths and plastic brushes (e.g. soft toothbrushes) for manual cleaning.
- ✓ Never leave instruments lying in a disinfectant solution for an extended period: solids in the solution will crystallize on the instrument metal and could form a growth medium - instruments left like this will be neither clean nor disinfected.
- ✓ **Points to remember:**
- ✓ Make sure your water pipes are rust free. Rust particles in steam from galvanized water pipes are carried over by steam and, combined with the heat, increase chances of corrosion on your instrument
- ✓ Dry instruments as quickly as possible to prevent water stains.
- ✓ Cheaper instruments are often made of different metals e.g. chrome and stainless steel and brass. These metals can interact with other instruments and start a rusting reaction.
- ✓ Needle-holders should be closed on 1st ratchet only - this will prevent stress fractures in the box joint area (tungsten carbide does not expand but stainless steel expands and contracts).
- ✓ Saline solutions are an instrument's worst enemy! Salt crystals form on the instrument surface and act like a miniature "grinding machine", severely damaging the instrument's surface layer. Tungsten carbide inserts are bonded to stainless steel by a special "silver soldering" – saline can weaken the bond and the tungsten carbide inserts can loosen and fall out.