

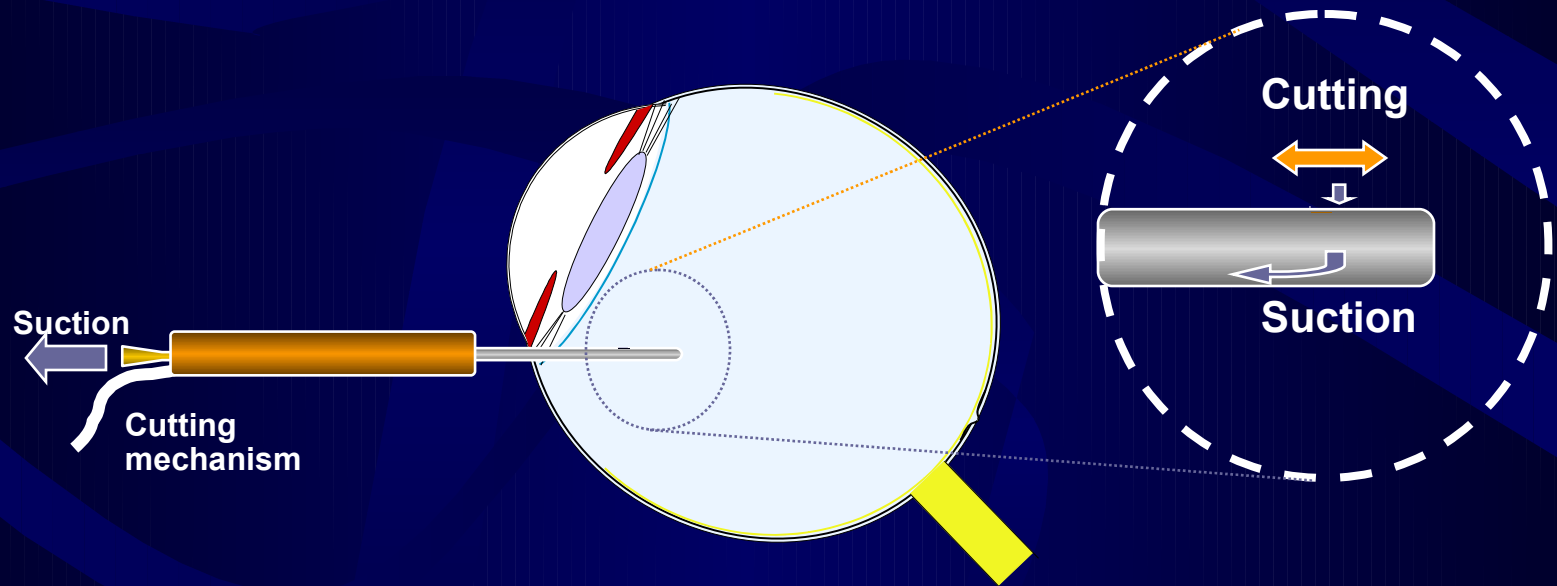
Understanding the Vitrectomy Machine

- Principles, Devices and Maintenance

ORBIS International

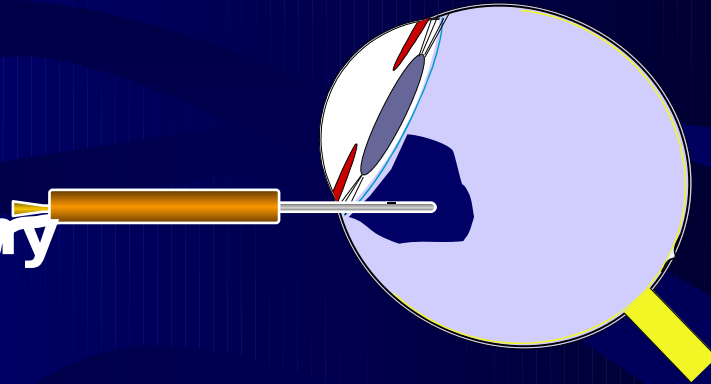
Vitrectomy Machine

- Vitrectomy cuts vitreous without pulling
- Posterior and anterior

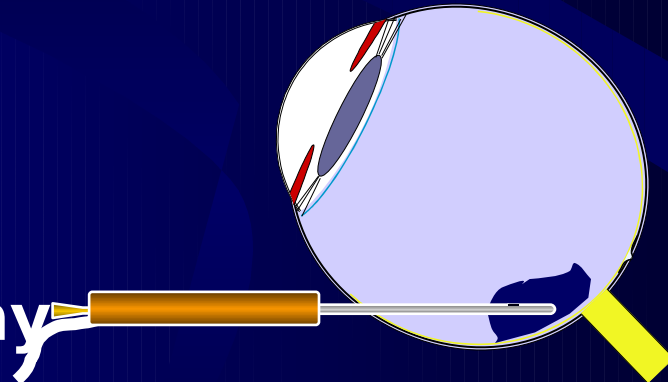


Vitrectomy

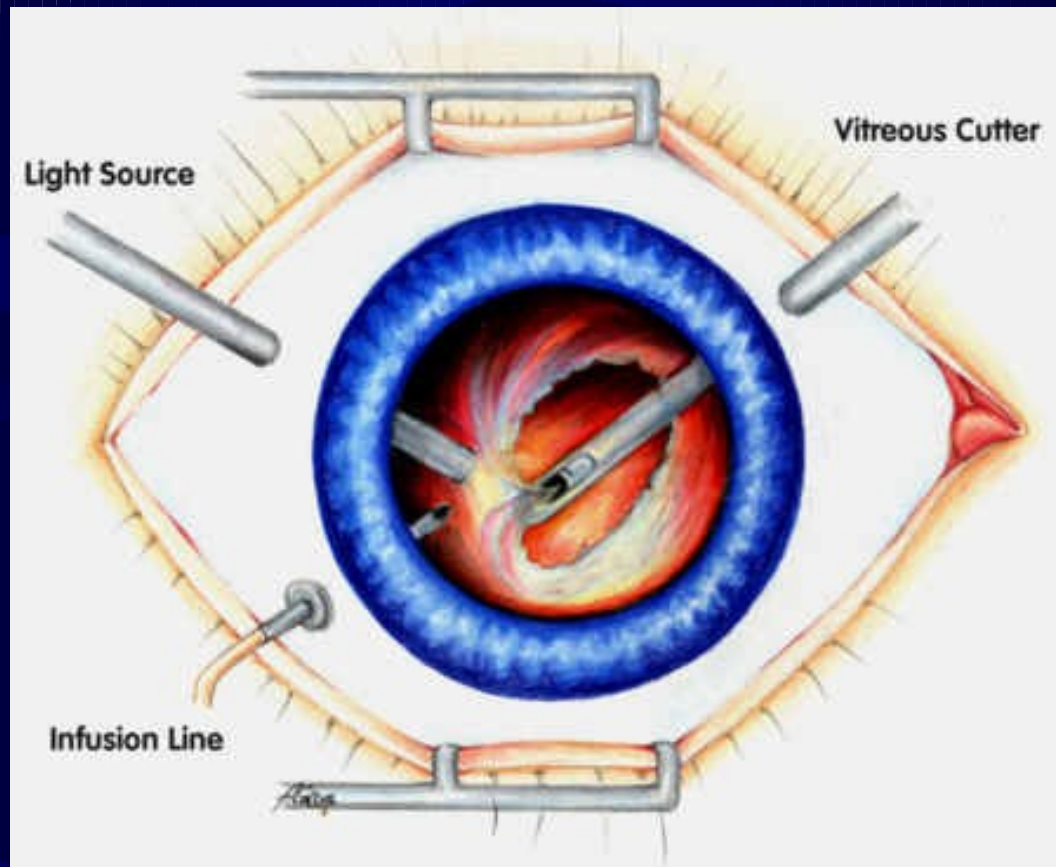
Anterior Vitrectomy



Posterior Vitrectomy

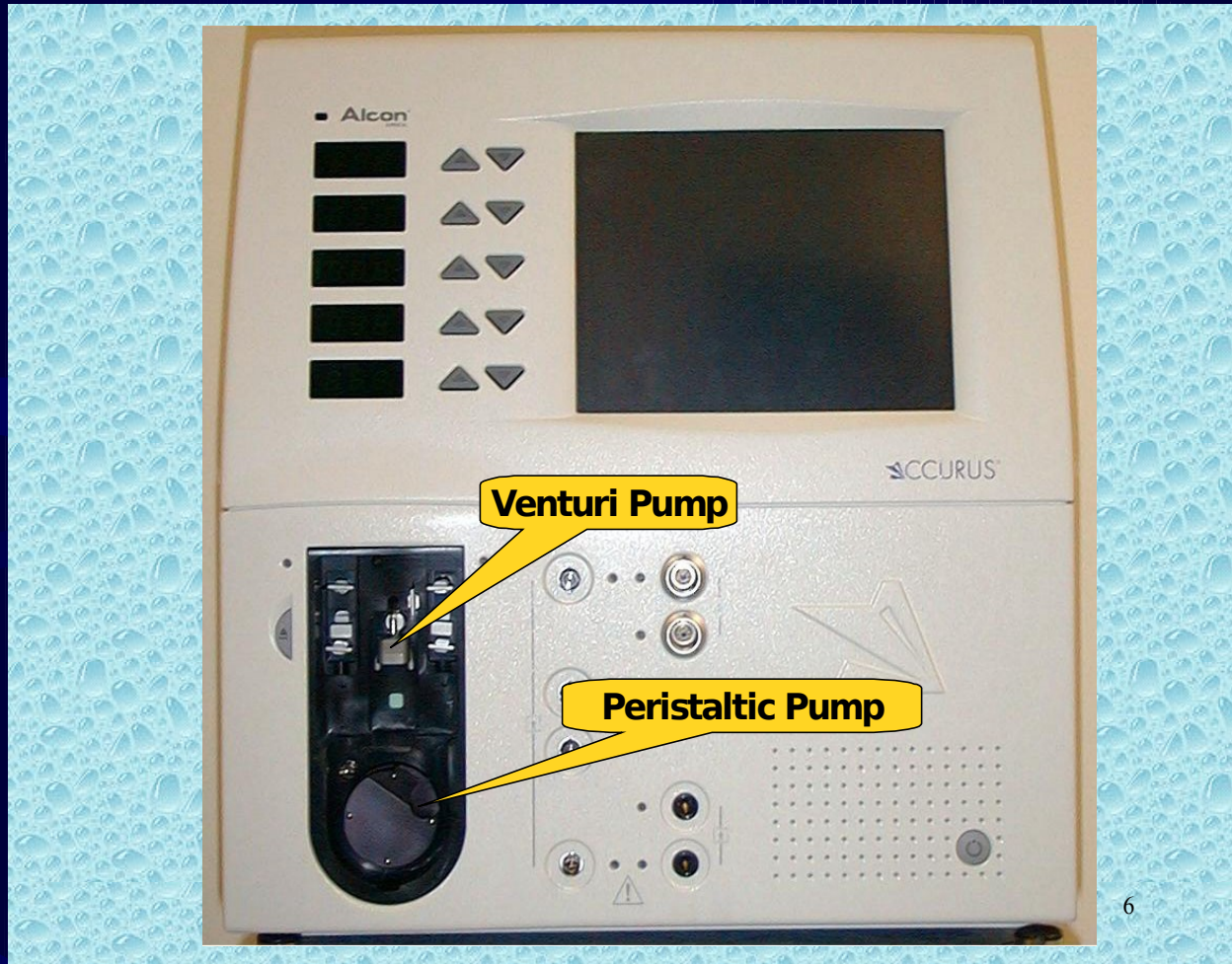


A Typical View of Vitrectomy Surgery under Microscope

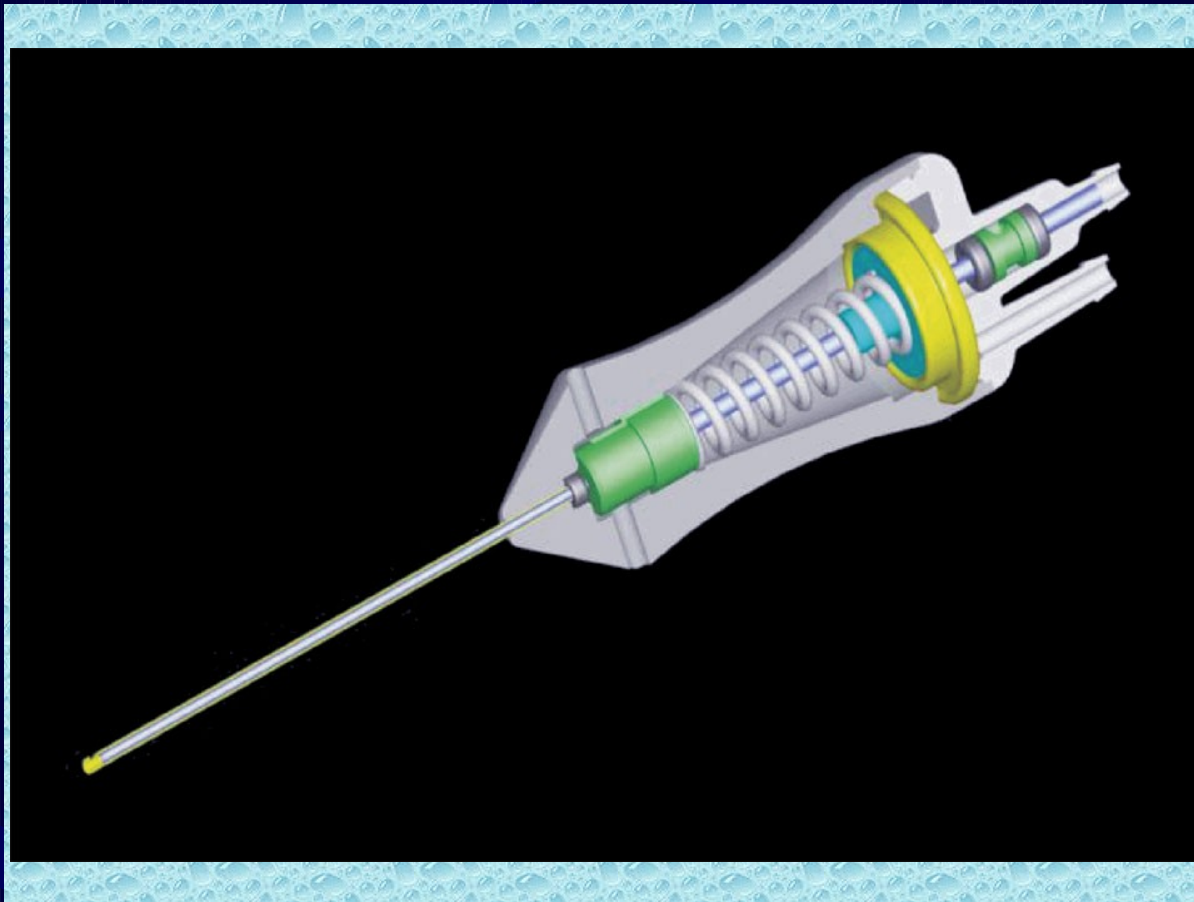


Getting Familiar with a Vitrectomy Machine

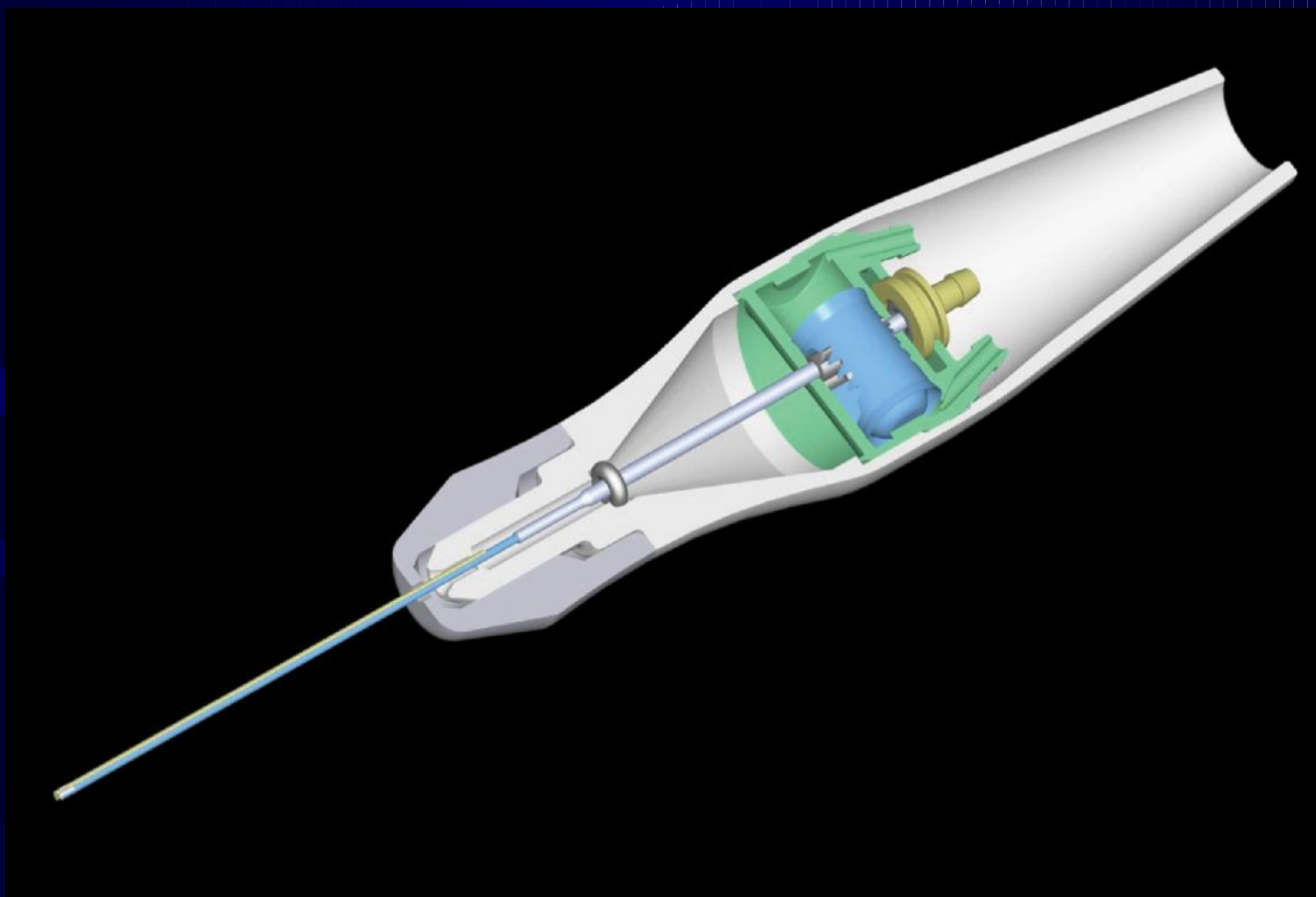




Vitreotomy Probe









Maintenance of Vitrectomy Probe

- Unless the probe is going to be reused there is little you will need to do
- Reuse requires thorough cleaning prior to sterilizing
- Flushing with distilled water while the cutter is activated and drying is essential
- Disposable cutters have a limited life due to the nature of the device
- If cutters fail after resterilizing then replace them

Fragmentation

- Problems are similar to those encountered with Phaco handpieces
- Failure to tune is probably due to a losetip
- Also ensure tips are not bent

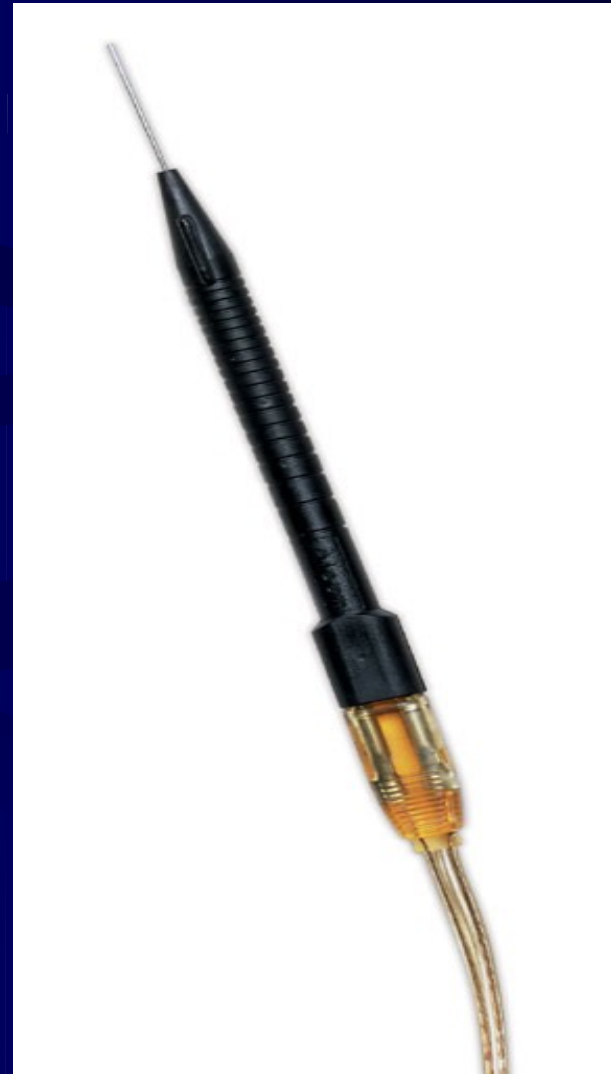


Fragmentation Hand-piece Tip



Diathermy Probe

- Diathermy failures are generally caused by a problem with the probe or the lead
- It is very, very rare that there is a problem with the diathermy module in the machine



Scissors/Forceps

- Whether electric or Pneumatic, these instruments are very delicate and need to be handled carefully
- Thorough cleaning is absolutely essential



Grieshaber Scissors/Forceps

Cleaning Steps

- Flush with sterile/distilled water (20cc X 2)
- Flush with alcohol (20cc X 2)
- Flush with air (forced or 60cc syringe)

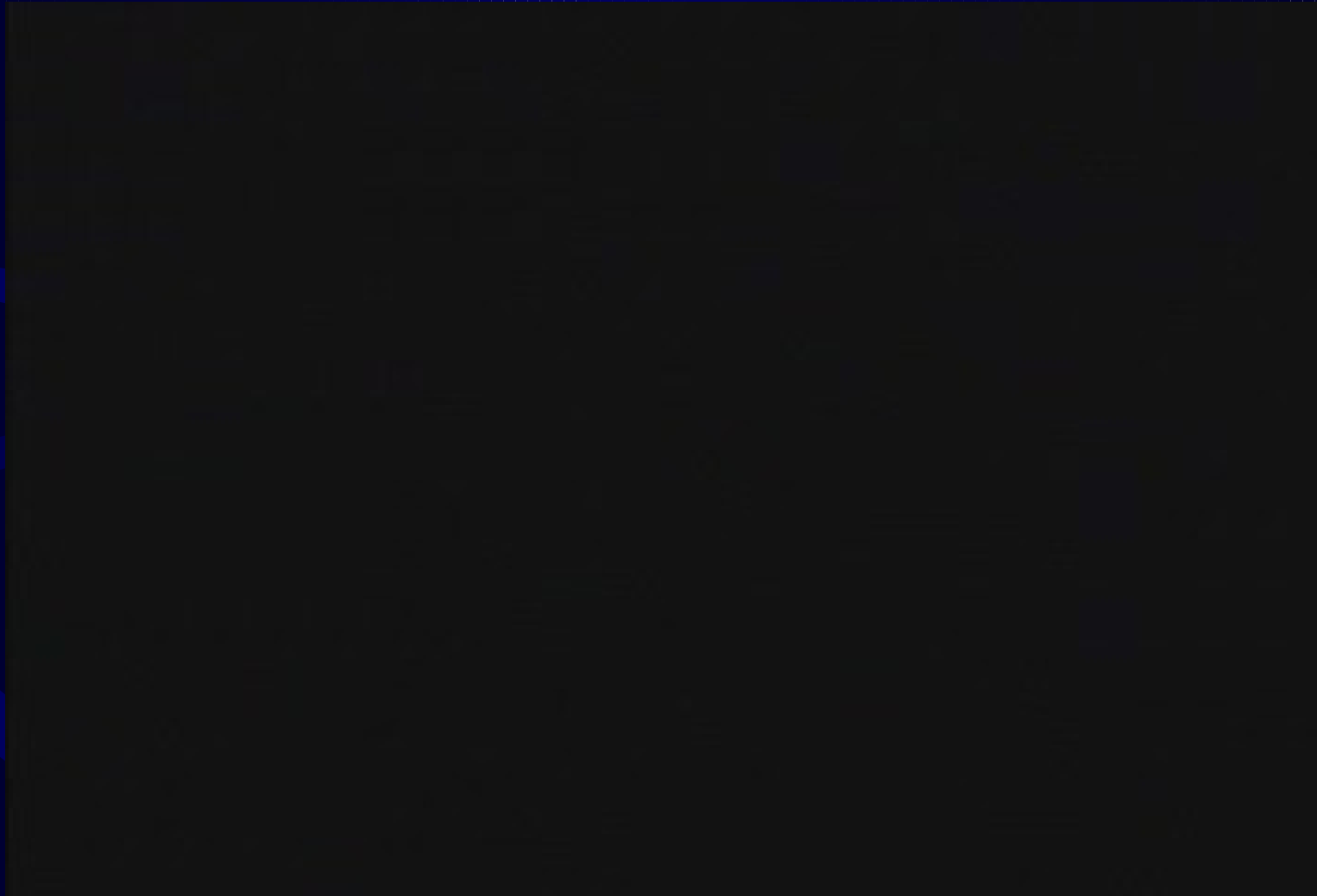


Grieshaber Scissors/Forceps Cleaning Steps

- Regular cleaning in an Ultrasonic cleaner is recommended except for “diamond coated” instruments



Cleaning Video





Foot-pedal

- Any fluid that accidentally falls on the footpedal needs to be cleaned off at the end of the surgery. Retained fluid can cause problems with the proper long term function of the footpedal.
- And don't drag the footpedal around by the cord. This will ensure the premature failure of the footpedal.