

ABVO PRACTICAL EXAMINATION

INTRAOCULAR SURGERY

CANDIDATE INSTRUCTIONS

You have 50 minutes to perform an extracapsular lens extraction (ECLE) on a cadaver eye (without lids). You will be informed when there are 25 and 10 minutes remaining to the examination.

During the surgery, you must demonstrate to the examiners the following:

- two-step clear corneal incision
- continuous curvilinear capsulorrhexis (CCC)
- extracapsular lens extraction
- closure of corneal incision

In the time allowed you may also:

- set up your instrument tray
- adjust the microscope, surgery chair/stool
- reposition the cadaver eye (needles are provided for pinning the eye in position)
- inflate the eye by injecting saline into the anterior chamber (**not** into the vitreous body as this may result in over-inflation)

The Practical examination is intended to evaluate surgical technique, tissue handling and the appropriate use of surgical instrumentation and operating microscope. You are **required** to mention any mistakes or unintended actions that you make during the surgery and explain how you would rectify the errors. You may comment on your performance throughout the surgery, but we ask that you do not narrate the surgical procedure, describe (or practice) sterile technique, or discuss the preoperative, perioperative or postoperative management.

Three examiners will grade your surgery. One will serve as your surgical assistant and will sit at the assistant scope; the other two examiners will be in the same room observing surgery on an external monitor. Be prepared to answer questions from the examiners at the conclusion of the procedure.

The passing point for the surgery is 70 (seventy). It is understood that candidates are nervous which may lead to errors during the surgery, and this is taken into consideration when determining the final score. Points will be deducted if an event during surgery would be likely to result in significant complications in a live patient.

Specific aspects of this surgery are evaluated as follows, and points are assigned depending on the complexity of the task. The information detailed below should serve as a guide for exam preparation, it is not meant to be all-inclusive.

ABVO PRACTICAL EXAMINATION

INTRAOCULAR SURGERY

TWO STEP CORNEAL INCISION

- handling corneal tissue - 0.12mm forceps
- surgeon hand position
 - placement of forceps for globe fixation
- corneal groove
 - location
 - blade held at appropriate angle
 - nonpenetrating and beveled
 - proper depth and length
- anterior chamber entry
 - keratome/blade appropriate angle
 - iris and lens avoided
 - width allows for insertion of corneal section scissors

CONTINUOUS CURVILINEAR CAPSULORRHESIS (CCC)

- use of viscoelastic
 - infusion into anterior chamber to replace aqueous humor
- capsulotomy
- removal of anterior lens capsule
- ripping and shearing forces
- appropriate size and shape for lens delivery
- management of radial tear

CORNEAL INCISION - EXTENSION

- corneal section scissors
 - use both left/right
 - correct blade angulation
 - compressed with suitable speed/ pressure
 - smooth closure without need to replace in incision line
 - incarceration of iris and Descemet's membrane stripping avoided
 - management of an iris prolapse

EXTRACAPSULAR LENS EXTRACTION

- atraumatic corneal manipulation
- smooth delivery of lens nucleus - avoiding iris trauma

CORNEAL INCISION - CLOSURE

- appropriate suture size; spatula needle
 - suture grasped 5-10 mm from needle whilst dangled from appropriate instrument
 - position of needle holder on needle shaft

ABVO PRACTICAL EXAMINATION INTRAOCULAR SURGERY

- needle position for corneal entry
 - vertical
 - clockwise rotation of needle at appropriate corneal depth
 - horizontal needle entry into opposite side of wound
- corneal forceps
 - fixation or counterpressure as needle passed
- sutures
 - placement of up to 5
 - location of cardinal sutures
 - correct suture depth and spacing
 - atraumatic handling of suture
- knot tying
 - surgeons, plus three or four throws
 - correct tension
 - suture ends cut close to knot (< 0.25mm) with dedicated scissors
- Integrity of suture line
 - re-establishment of the anterior chamber
 - wound apposition

GENERAL TISSUE / INSTRUMENT HANDLING

- necessary instruments available
- appropriate choice of instruments for each step of the surgery e.g.
 - appropriate blade
 - capsulorrhexis forceps
 - delivery of lens nucleus
- globe stabilization - placement of stay sutures/instruments
- handling of tissues
 - precise and gentle; sufficient corneal irrigation