

EYE SURGERY SCRUB TECH
AND CIRCULATOR FIELD GUIDE
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START OF THE DAY

1. Look at the list of cases for the day and the doctor's preference card for each type of case to make sure you have everything that is needed for the case (sutures, syringes, extra instruments, etc.)
2. Make bins (or if no containers are available, then piles) - one for each case -- of everything you need for each case, for example:
 - Gowns
 - Gloves
 - Syringe for simcoe cannula
 - Surgical pack with drapes, etc
 - Suture, Vision blue, Viscoat
 - Extra instruments that are not in the instrument set
 - Basically, anything needed for the case except the instrument set
3. Set up all equipment
 - Microscope
 - Turn it on to make sure working
 - Place foot pedal on left
 - Cautery -- foot pedal on right
 - Bed/Stretcher
 - Stool
 - IV pole with bag.

OR TABLE (STERILE)

Can be done by Circulator - This space is where all sterile supplies are kept during the case.

- Open the SEE pack which contains the surgery pack (blue) and the prep pack (white)
 - Open flaps in this order: first away from yourself, then side, side, towards
 - The SEE pack may have a number of extra items in it that are not needed. These can be saved or used in other areas of the hospital.
- Sterile table cover (can use surgical pack wrapper)
- Weck sponges
- Cup for BSS (refill for hydration and irrigation syringe)
- MD gloves
- MD gown
- Scrub nurse gloves
- Scrub nurse gown

HINT: Open gloves and gowns last and put them on top since they will be the first thing you use after scrubbing.

PREP TABLE (STERILE)

Can be done by Circulator. This is used by the circulator to wash the eye in preparation for surgery. The Alcon pack will have everything in it, but if not, the following items are needed:

- Sterile cover on prep table (this can be the white wrap the supplies come in, as long as it is opened carefully and in the proper order.
- Sterile gloves
- Sterile cup containing povidone iodine
- Sterile cup containing BSS/sterile water for rinse and dilution
- Q-tips
- 4x4
- Bulb or 5-10 cc syringe for irrigation. If not available, sterile 4x4 can be used to irrigate the eye.

AFTER SCRUBBING

- Put on your gown (if available)
- Put on your gloves
- Maintain sterile conditions! This is the hardest part while you are learning. If you accidentally touch a non-sterile area, or a non-sterile item enters the sterile field **SAY SOMETHING. DO NOT IGNORE IT.** It happens often even to very experienced surgeons and nurses (almost daily). It is not a problem at all. But, IF YOU SAY NOTHING, IT IS A BIG PROBLEM because of the risk of infection that can result in blindness. If you think you might have broken sterility, then it is safest to treat it as a breach in sterility rather than thinking it might be okay.

SET UP INSTRUMENTS - On the Sterile OR TABLE. Look at the **doctor's preference card** and open supplies and instruments and **line them up in the order** they will be listed (which is the order listed on the card). This is the critical part of the set up, because by following the card you ensure that you have all the supplies, and you are ready to hand them to the doctor in the right order.

HINTS

- BSS tubing to be handed off to circulator to connect to BSS bag. Keep the blunt end on the sterile field to connect to the Simcoe cannula. The sharp end goes to the circulator who will spike it into the BSS bag hanging on the iv pole.
- Have BSS in 3 ml syringe at ALL times as this can be needed urgently.
 - NOTE: ALWAYS triple check the cannulas on any syringe to make sure they are secure before handing them to surgeon!!! **UTMOST IMPORTANCE!!!** If it is not secure, it can shoot into the eye during surgery and cause severe damage.
- Ensure there are no air bubbles in any syringe. Prior to putting cannula on syringe, put BSS in the hub of each cannula (even viscoelastic cannula). This helps get rid of air in the system.
- If trypan blue or Triesence are used, only draw 0.1-0.2 cc into a TB syringe. There is not very much of either of these in the supplies and they must be conserved.
- Be extremely careful when handling knives and sutures. The eye blades are extremely sharp.

- On standby - don't open, but have them nearby for every case in case needed
 - TB syringe for Trypan blue
 - Trypan blue
 - 10-0 suture for closure
 - Extra viscoelastic (ProVisc, Viscoat, Healon, DuoVisc are some of the common brand

names that you might hear)

- On standby in case of need for vitrectomy
 - Triesence
 - Extra Weck sponges
 - Extra viscoelastic
 - Miostat/Miochol
 - Anterior chamber IOL
 - Vitrector, if available.

WHEN THE DOCTOR ARRIVES

- Gown the doctor
- Glove the doctor
- Drape the eye
- Surgery begins

HINTS

- Wet the cornea: Throughout the case, it is up to you to keep the cornea hydrated with BSS drops periodically
- Do not wet the cornea or the field immediately after the doctor has dried it.
- During some steps of the cautery or incision you may be asked to irrigate continually to keep the field clear of blood.
- Anticipate the need for suturing and have it ready to go if needed.
- Pay attention to the surgery, and anticipate the surgeon's needs.
- Sometimes the surgeon may forget a step. If you notice this, remind the doctor by asking, "Do you want to _____ now?"
- Ocular instruments are very delicate and very expensive. Do not drop them or let them bump into one another. Do not wipe them aggressively. Everything should be very gentle with the instruments.
- Be extremely careful when handling knives and sutures. The eye blades are extremely sharp.

END OF PROCEDURE

- Doctor removes the eye drape
- First: Get the sharps off the field. If being reused, put them in the instrument tray. If not, dispose of sharps properly
- Second: Put surgeon's instruments back in tray. This includes re-used disposable items such as blades and cannulae and cystotomes.
 - Flush all cannula with BSS and then with air.
 - Very gently wipe instruments and clean them of any particulate matter or obvious blood. **VERY GENTLY.**
 - The person who will sterilize the instruments will wash them all with distilled water and possibly a mild enzymatic cleaner to clean them of protein and blood. They will irrigate all cannulae with distilled water, and then air before autoclaving them.
- Third: Make sure all instruments are in the tray
- Fourth: Carefully look at the field to make sure no sharps and no instruments are left behind. Ensure you have ALL instruments each and every time. Make list for each instrument set and compare because it can be easy to accidentally throw an instrument away.
- Fifth: If all instruments and sharps are cleared, then throw away drapes and other

disposable items into proper receptacle.

- ❑ NEVER THROW AWAY IRIS HOOKS. THEY ARE REUSED.
- ❑ BSS Bag. Can re-use bag from case to case. Change tubing if possible for each case. If not possible to change tubing, wipe with alcohol between cases.
- ❑ Lastly: Wipe down stainless surface areas and OR bed with antimicrobial wipe if available. If not, use what is available, except NO ALCOHOL IN OR (it's flammable).

OTHER

- Disposables are often reused, so don't throw anything away unless you ask, especially blades.
- Never hesitate to ask circulator for supplies you need, especially before it is urgently needed.
- Always have surgeon present before draping the operative eye (just another way to ensure the correct eye is being operated on).
- Do the same thing for every case, do not change things up. This ensures no missed steps, safety for the patient, and safety for yourself.
- **WARNINGS**
 - ONLY BSS or Lactated Ringers are used inside the eye. Do not have other fluids like normal saline or distilled water in the area as things can get mixed up.
 - At times, there may be the need for additional anesthesia during the case. If anesthesia is to be placed inside the eye, it MUST BE PRESERVATIVE FREE LIDOCAINE. Please ensure that regular lidocaine is not injected into the eye. Regular (preserved) lidocaine can be used for more anesthesia subconjunctivally during the case.
 - Some drugs are poisonous if they enter the eyeball. Gentamicin is one of them, yet it may be given at the end of the case around the eye. It is critical that the Gentamicin does not make its way onto the field before it is needed, because it may then be inadvertently put into the eye. So if gentamicin is being used, give this only when it is needed -- straight from the bottle, into a syringe, and then injected around the eye.

CIRCULATOR RESPONSIBILITIES

- Possibly get patient from pre-op area and transport to OR and back out
- Patient safety initiatives: ensure correct surgery, correct patient, correct eye. TIME OUT.
- Paperwork
- Move foot pedals for scope/cautery, or troubleshoot any equipment failures/problems
- Open supplies for surgery as needed
- Administer post-op drops/meds
- Clean and patch the eye at the end of the case

AT THE END OF THE DAY

- The scrub and circulator will ensure all equipment is turned off properly and OR is cleaned and all supplies are put away.