

Clinical Process Instruction Manual

Ocular Recovery Preparation Process Instruction

Policy:

The Tissue Recovery Coordinator (TRC) is responsible for ocular recovery surgical procedures. This document describes the preparation process of the workspace and donor for the recovery of ocular tissue.

Process:

The TRC is responsible for performing the ocular recovery preparation process steps below.

1. Evaluate all necessary equipment:
 - 1.1. Check expiration dates on all supplies and kits prior to being dispatched to recovery site. Optional to record the instruments and supplies lot numbers/kit numbers at this time
 - 1.2. Ensure extra supplies (i.e., gloves, cotton tipped applicators) are packed in the recovery bag in the event of missing supplies.
 - 1.3. Transport necessary instrument kit and supplies to donor site.
2. The worksite environment must meet these requirements:
 - Visibly free of insects, rodents and other pests
 - Adequate table top space
 - Area must be clean and dry, moisture will compromise the integrity of the sterile field
 - Findings to be documented into the donor management system, under "Recovery Site Inspection: Summary".
3. Verify signed and witnessed consent for ocular tissue recovery, any restrictions from the Coroner, and if any special instructions have been requested by the next of kin (i.e., prayer or moment of silence commencing recovery).
4. Put on protective apparel to protect from potential exposure to communicable disease:
 - Latex examination gloves
 - Mask with face shield
 - Cap to cover hair
 - Moisture impermeable gown
 - Shoe covers
5. Verify the donors ID:

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- 5.1. Check donor's hospital wrist band, toe tag and/or other identification attached to the donor's person, to ensure it matches: name, MRN and DOB on the consent.
- 5.2. Donor recovery shall not proceed unless the donor's identity can be confirmed. This may include a Health Care Professional (HCP) or other individual who can visually confirm the identity of the donor.
6. Perform a physical assessment as per *Physical Assessment for Tissue Process Instruction, CPI-9-510* and a blood draw as per *Blood Collection Process Instruction, CPI-9-511*.
7. Perform a penlight exam by examining the upper/lower eye lids, conjunctiva, cornea, pupil and iris. Intra-Ocular exam to be done after In-Situ Recovery. During this exam, any signs of disease, infection, trauma or previous surgery will be documented.
8. Prepare the worksite:
 - 8.1. Identify appropriate space that is near the donor on which you later set up your sterile field.
 - 8.2. If necessary, wipe the space with anti-microbial wipes
9. Prepare the face of the donor:
 - 9.1. Elevate the donor's head if this has not already been done. This prevents pooling of blood in the orbital area which could lead to excessive bleeding, swelling, and bruising after ocular tissue removal.
 - 9.2. Clean the orbital area and surrounding skin of the donor, using gauze moistened with water or normal saline. Cleaning the blood, make up, dirt or debris from the donor's face particularly focusing on the area surrounding the eye. If the donor is wearing contact lens(es), please remove the lens(es) at this time.
 - 9.3. Gently open each eyelid and thoroughly and copiously irrigate the cornea and conjunctival sac of each eye with one bottle of sterile ophthalmic solution (sterile normal saline) medial to lateral. Irrigation removes debris, microorganisms and other sources of contamination from the donor's eye. Do not direct a high-pressure stream of sterile normal saline at the cornea.
 - 9.4. Wipe the excess saline around the orbital area with gauze.
 - 9.5. Close the eyes and prep the operative area by wiping lids and surrounding area with alcohol wipes working in a pattern from the eyelids out sequentially.
10. For enucleation and in-situ:
 - 10.1. Use sterile cotton tipped applicator to open the eyelid. Gently instill ½ bottle of betadine 5% (1.5 mls) into each eye. Drop betadine into the upper and lower fornices and corneal surfaces. Leave for 2 minutes then irrigate the ocular surface using half a bottle of saline per eye, (15 mls).

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11. Using standard pre-operative skin preparation, use a Povidone Iodine (PI) swab and start at the medial canthus to the lower lash line and follow to the lateral canthus and, around to the upper lid lash line and above the lid, in an ever-widening circular rolling pattern. This circular rolling pattern should reach as high as the eyebrows and as low as the cheekbones (just above the nasal labial fold).
 - 11.1. Use a second PI swab to cover the bridge of nose, then move across the nasolabial fold to the temple and across to the mid forehead, ensuring eye-brows are adequately disinfected.
 - 11.2. Use a third PI swab to re-cover the areas that the first PI swab covered.
 - 11.3. Repeat this preparation to the other eye using three new PI swabs.
 - 11.4. Do not directly wipe over the same area more than once with the same swab.
 - 11.5. Slightly overlap sequential wipes with the previous wipes to ensure that all regions are thoroughly covered.
 - 11.6. Swabs continue to be moved in a circular, continuous sweep, medial to lateral under the eye then lateral to medial once above the eye-brow.
 - 11.7. During this process, avoid reaching over any areas that are already wiped.

12. If performing in-situ cornea excision:
 - 12.1. Use sterile cotton tipped application to open the eyelid and gently instill ½ bottle of betadine 5% (1.5 mls) into each eye. Leave for 2 minutes gently rinse each eye with BSS (15mls) to remove the 5% betadine solution. Close the eyes with a cotton tip applicator.

13. Establish a worksite sterile field
 - 13.1. Re-check the packaging of all the sterile supplies to ensure the integrity and confirm the expiration date before opening.
 - 13.2. Ensure all the external/internal chemical indicators in or on the sterile supply packages indicate that the sterilization was successful.
 - 13.3. Sterile Preparation
 - 13.3.1. Prepare the sterile field by placing the instrument pack on a solid surface and carefully opening the sterile instrument pack using the flaps without touching the inside. The area within the sterile wrap is your sterile field. Open the additional sterile supplies such as sterile drapes, cotton-tipped applicators, sterile gloves etc. by carefully peeling the bags and flipping the items onto the sterile field.
 - 13.3.2. Ensure that sterile conscience is used when opening supplies into the sterile field. The following principles apply:
 - 13.3.2.1. Sterile supplies that are placed in the sterile field should be placed in a manner from bottom to top. The first items to be used are opened last, and subsequent items are opened in reverse-order or use
 - 13.3.2.2. Ensure that sterile best practices are used in relation to the three-dimensional space above your sterile field.

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- 13.3.3. Open the sterile sleeves by carefully peeling open the plastic wrapping and carefully place beside the sterile field. Do not remove the sterile sleeves from the open packaging.
- 13.3.4. Open the second set of sterile gloves beside the sterile field or in the sterile field (the last item as the gloves are used first).

14. Prepare packaging for ocular tissue:

Whole globe enucleation

Sterile Glass Jars:

- 14.1. Label the glass jars during this set up process by ensuring not to compromise the sterility of the inside of the jars.
- 14.2. Open the eye jars, carefully making sure that the sterile inside of the jar is not compromised (cotton ball and roll are intact inside the jar).
- 14.3. Place the jars adjacent to the sterile field. Remove lid and perform a sterile pour of approximately 5 mL of saline into each container. Then place the lid back on the container, keep in mind that the lid and outside of the container is no longer sterile.
- 14.4. Once the TRC is scrubbed in and gowned/gloved/sleeved, utilize sterile gauze to handle the lid(s) of the container(s) to avoid contamination.

Sterile Specimen Containers:

- 14.5. Label the specimen containers during this set up process, ensuring not to compromise the sterility of the inside of the containers.
- 14.6. When the sterile field is set up, utilizing sterile techniques, open the contents of the sterile paper sterilization pouch into your sterile field.
- 14.7. Place the containers adjacent to the sterile field (not in the sterile field). Remove lid and perform a sterile pour of approximately 5 mL of saline into each container. Then place the lid back on the container, keep in mind that the lid and outside of the container is no longer sterile.
- 14.8. Once the TRC is scrubbed in and gowned, gloved and sleeved, utilize sterile gauze to handle the lid(s) of the container(s) to avoid contamination.
- 14.9. Place the sterile cotton and dental roll into the sterile specimen container aseptically.

In Situ – Corneal Viewing Chambers:

- 14.10. Check both containers of storage media (i.e. Optisol) for leakage, expiration date, pH shift, and turbidity, and ensure seals remain intact.

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- 14.11. Position the chambers appropriately with respect to the sterile field.
 - 14.12. Remove sterile corneal viewing chambers from packs and label with OD (right) and OS (left). Loosen tops of the chambers to the final thread.
 - 14.13. Remove lid and perform a sterile pour of media from vials to chambers. Then re-place the lid back on chamber, keep in mind that the lid and outside of the chambers are no longer sterile.
 - 14.14. Once the cornea is excised use sterile gauze to handle the lid.
15. Refer to *Gowning and Surgical Scrub Process Instruction, CPI-9-519*.
 16. Refer to *Eye Enucleation Process Instruction, CPI-9-512* or *In Situ Process Instruction, CPI-9-520* for the eye/cornea recovery methodology.

Records:

- No records

References:

- *Physical Assessment for Tissue, CPI-9-510*
- *Blood Collection Process Instruction, CPI-9-511*
- *Eye Enucleation Process Instruction, CPI-9-512*
- *Gowning and Surgical Scrub Process Instruction, CPI-9-519*
- *In Situ Process Instruction, CPI-9-520*