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Tissue Storage

The Rocky Mountain Lions Eye Bank utilizes Optisol™ GS as its primary storage media for corneal tissue. Guidelines for transplant tissue storage in our facility meet Eye Bank Association of America standards, in that each tissue is stored in its own container at a temperature between two & eight degrees Celsius. All tissue is quarantined until processing procedures are complete, and donor eligibility and tissue suitability is established. Surgeons wishing additional data concerning Optisol™ GS media should contact the eye bank. Research tissue is stored fresh or frozen. We no longer provide formalin-preserved tissue for research. For our policy on sclera preservation, please see the sclera section below. Please direct specific questions about tissue storage to the Technical Manager.

Donor Eligibility and Tissue Suitability

Donor eligibility is determined based on results from a medical chart review, next-of-kin interview, infectious disease testing, and donor physical examination. Other available sources for screening and medical or social history information may also be used. Tissue suitability is determined by evaluating the individual tissue for specific characteristics. Tissue suitability specifications are established by compiling surgeon request information and published scientific or eye banking standards. Tissue evaluation and processing procedures are performed for each cornea to determine the tissue specifications. Any “open container” processing procedures required are performed under aseptic conditions. Tissue is offered to transplanting Surgeon once tissue suitability is established. Upon completion of donor eligibility for transplant, the tissue is removed from quarantine storage and can then be delivered for surgery.

Donor Infectious Disease Testing

All ocular tissue for surgical use is tested by FDA registered laboratories certified under the U.S. Clinical Laboratory Improvement Act, using Food and Drug Administration (FDA) licensed, approved or cleared donor screening tests. For release, all surgical tissue must be found non-reactive for FDA and Eye Bank Association of America required tests. Any questions regarding laboratories, methods, or results should be directed to the Technical Manager.
Tissue Distribution

The Rocky Mountain Lions Eye Bank is committed to a system of fair and equitable tissue distribution, without regard to sex, age, religion, creed, color, or national origin. The Rocky Mountain Lions Eye Bank strives to place every transplantable cornea. Distribution is driven by first come, first served patient waiting lists maintained by the eye bank and Surgeons are encouraged to submit formal requests for tissues.

Requesting Transplant Tissue / Listing Your Patient

Colorado has the highest donation rates in the nation. This allows you to schedule surgeries in advance and we are able to provide tissue on time for over 95 percent of scheduled surgeries. For all cornea transplant procedures, please schedule and list patients for surgery at least two weeks in advance but no more than six weeks in advance. Please do not list patients until surgery is necessary. Listing patients greater than six weeks or before a transplant is indicated is not necessary, as six weeks reflects the average waiting time for patients on our list. Surgeons and patients are asked to understand that patients listed ahead of scheduled surgeries may be offered available tissue first. Rocky Mountain Lions Eye Bank makes no guarantees concerning the availability of corneal tissue for any scheduled case.

If a scheduled surgery is canceled, the eye bank will maintain the patient on the waiting list pending rescheduling for up to three months. If rescheduling does not take place within three months, the patient will be removed from the waiting list, it is the surgeon’s responsibility to make sure the eye bank is kept up to date when cases are canceled or rescheduled.

The eye bank does not maintain the waiting list for any surgeries for more than one year. If a patient has been on the waiting list for more than a year without receiving a graft, they will be removed from the list unless special arrangements have been made and communicated to the eye bank.

When requesting tissue, please complete the Rocky Mountain Lions Eye Bank tissue request form with the surgical procedure, tissue type needed, the required recipient information and any special needs. Incomplete tissue request forms may not be acceptable, which could require additional follow-up phone calls before the patient can be added to the waiting list. If a purchase order number (PO #) is required by the organization or facility responsible for reimbursing the eye bank then please provide a PO # on the tissue request form. You may also request tissue using the secure, online form found at www.corneas.org. Contact the Public & Professional Relations department for access to the online tools.
Pre-sectioned tissue for DSEK/EK and IntraLase-Enabled Keratoplasty

The Rocky Mountain Lions Eye Bank offers pre-sectioned corneal tissue for endothelial keratoplasty or anterior lamellar keratoplasty. Locally recovered corneas are sectioned for DSEK/EK by trained RMLEB staff.

Tissue for IntraLase-Enabled Keratoplasty is also available. Please contact the eye bank for more information.

Both types of pre-sectioned tissue are prepared in compliance with applicable governmental and FDA regulations relating to the procurement, storage, processing and distribution of human tissue. The tissue is prepared according to Current Good Tissue Practices (CGTPs).

The process for IEK adds only two days to the tissue placement process, so surgeries scheduled according to our scheduling procedure (Fair and Equitable Distribution System), can easily be accommodated. Please note that pre-sectioned tissues cannot be returned to the eye bank.

For additional information, contact the Technical Manager at (720) 848-3957 or via email at distribution@corneas.org.

Emergency and Urgent Cases

Rocky Mountain Lions Eye Bank, and the Eye Bank Association of America, recognizes a corneal perforation as an emergency. Surgeons are asked to accept tissue of any age for emergency cases if it is within accepted medical standards. The eye bank will work with other eye banks in obtaining tissue for such cases if necessary. Emergency cases supercede all other cases on the waiting list.

An urgent case is a pending perforation or other condition where the integrity of the cornea is at risk. Surgeons may list patients on an urgent status if other medical circumstances warrant. Urgent cases are handled similarly to emergency cases, however, the surgeon may request tissue with specific criteria features if circumstances allow.
Required Recipient / Patient Information

In order to maintain an accreditation with the Eye Bank Association of America, and to continue to provide surgical tissue for transplant, Rocky Mountain Lions Eye Bank is required to collect and retain recipient information for each tissue transplanted. The information is regarded as confidential and privileged and is necessary in order to track each tissue from donor to recipient, and recipient to donor. The transplanting Surgeon is expected to provide Rocky Mountain Lions Eye Bank with required recipient information which includes: Patient’s name, a unique identification number (social security, medical record etc.), date of birth, age, diagnosis (indication for transplant), transplanting Surgeon’s name, date of surgery, location of surgery, and an indication of any operative or post-operative complications related to the tissue.

Delivery of Tissue

All transplantable tissue will meet or exceed Eye Bank Association of America, State of Colorado, and U.S. federal government standards and guidelines for transplantation. Tissue can be delivered by a variety of means. The eye bank has at its disposal a network of courier services. Our proximity to one of the world’s most efficient airports, Denver International Airport, affords us many options in sending tissue just about anywhere. We are always happy to go the extra mile in making specific arrangements. Please do not hesitate to contact the eye bank with any special needs regarding delivery of tissue.

Post-Operative Outcomes

Rocky Mountain Lions Eye Bank requests post-operative outcome for each tissue transplanted. Surgeons are sent a Recipient Follow-up Letter between three and twelve months after tissue transplant which requests the post-operative outcome information. The eye bank strongly encourages surgeons to complete and return the form. Should a recipient suffer any tissue related adverse reactions, adverse events, or problems notify the eye bank as soon as possible. Rocky Mountain Lions Eye Bank should be notified of any comments or tissue related complaints.
Returning Tissue

Tissues that have been delivered to a surgery site may be returned if unused. These should be returned as soon as the surgeon deems that the tissue will not be used. **Once the tamper evident shrink seal has been broken, the tissue may not be returned.** Pre-sectioned tissues for DSEK/ALK and IntraLase-Enabled Keratoplasty require extra handling and care. Please be aware that due to the customized nature of these allografts, the Rocky Mountain Lions Eye Bank cannot accept returned pre-sectioned tissues.

Tissue placed outside of the United States cannot be returned. Please contact the eye bank immediately if any tissue cannot be transplanted to the indicated patient.

Scleral Tissue

The Rocky Mountain Lions Eye Bank preserves sclera in absolute alcohol. We no longer use glycerin for sclera preservation based on studies showing alcohol as the preferred method. Study references can be obtained by e-mail from the eye bank. Sclera is preserved in whole sections only. Requests for sclera should be made in the same fashion as requests for corneal tissue.

Research Tissue

Tissue for research/education purposes is generally available upon request, but researchers are encouraged to submit requests in advance. Fresh whole globes will be procured according to request and availability of suitable donors. Globes are no longer formalin preserved. Infectious disease **testing is not routinely performed on research tissue.** There is a fee for the processing of research tissue.