

Expectations for Personnel Performing Surgery

Successful surgical outcome relies upon good surgical technique (i.e. asepsis, gentle tissue handling, minimal dissection of tissue, appropriate use of instruments, effective hemostasis, and correct use of suture material), an ability to assess animal well-being, appropriate and successful use of analgesia and anesthesia and following appropriate planning and dialogue with the veterinary staff. (The Guide, 8th edition, 2011).

Personnel conducting surgical procedures must have appropriate training to ensure that good surgical technique is practiced. All persons performing survival surgery on vertebrate animals must have adequate training and experience appropriate to the proposed surgical procedure, to the species, and be in compliance with the applicable ARAC guidelines governing rodent survival surgery (http://oacu.od.nih.gov/ARAC/documents/Rodent_Surgery.pdf).

The ACUC expects the surgeon to utilize aseptic technique which includes the following:

- Remove the hair on the surgical site (typically by clipping or shaving or use of a depilatory cream.)
- Surgically scrub the site using betadine or chlorhexidine scrub and wiping with alcohol, a total of three times, using sterile gauze or sterile cotton tip applicators. It is recommended to spray the surgical site with a betadine or chlorhexidine solution spray once the scrub is completed.
- Use of sterile instruments that have been autoclaved (or equivalent method of sterilization). Between animals, it is acceptable to sterilize only the tips of surgical instruments i.e. a “tips only” technique.
- A sterile surgical drape will be used.
- Use of sterile gloves Other protective equipment to include a lab coat, face mask, and hair bonnet.
- The surgeon or trained designee should monitor postoperative animals daily and provide analgesics as described in the protocol.
- Sutures or wound clips should be removed between 7-14 days (as described in the protocol).

Animal users responsible for surgery or for care of operated animals must also be familiar with proper use of anesthetics and analgesics, signs of pain in animals, and the associated record keeping requirements (http://oacu.od.nih.gov/ARAC/documents/Pain_and_Distress.pdf).

The ACUC in consultation with the Attending Veterinarian may assess someone’s proficiency on the basis of education, medical or technical credentials, successful previous experience, and/or observation by a member of the veterinary staff.

Conditional Administrative Review (Veterinary Verification) for the addition of new personnel who will perform surgeries on an existing animal study proposal will not be granted until proficiency can be evaluated or ascertained. This may occur by discussion between the new surgeon and the veterinary staff or training of the new surgeon by LASP. The ACUC typically delegates the approval process to the Attending Veterinarian or designee in line with Category 2.1 of the NCI ACUC Significant changes policy.

Continuing review of surgical outcomes occurs with daily health checks and follow up by the Facility Veterinarian on any animals with unexpected sequelae. To ensure that the facility staff is aware of post-op animals, the cages of any rodents undergoing survival surgery must be identified by a dated and colored post-operative tag.

Surgical Procedure _____		Date _____				
Surgeon _____		Number of animals _____				
Anesthesia _____						
Post-operative Analgesia _____						
Notes / Complications _____						
Post-op Monitoring						
Date						
Incision OK						
Pain Eval.						
Initials						

When animal study proposals or modifications that include a surgical procedure are submitted, the committee may grant limited approval or request that a member of the veterinary staff provide oversight and assurance that the surgeon’s skills are consistent with standards of modern veterinary practices. Post-approval monitoring is documented by the ACUC-Coordinator. Problems identified will be corrected immediately, and if serious, may be reported by to the ACUC for deliberation.

LASP offers a basic surgical training class. For more information, contact your NCI Facility Veterinarian or ACUC Administrative Staff.