

Institutional Animal Care and Use Committee

Rodent Survival Surgery Checklist

Surgery Room/ Area (See Table 1)

- Clean and disinfect the surface with a disinfectant before each surgery.
- Provide adequate lighting.
- Provide heat source.

Patient Preparation (see Table 2)

- Prepare animal in an area separate from the surgical site.
- Remove hair from the incision with clippers or razor.
- Place non-medicated ophthalmic ointment in eyes.
- Prepare warm sterile saline or LRS (fluids) for prolonged or invasive procedures (mice: 1-2 ml, rats: 5-7 ml).
- Transfer animal to surgical area.
- Position animal with tape or gauze strips. Do not overstretch the legs or bind them to restrict circulation.
- Scrub with chlorhexidine or povidone-iodine, rinse with sterile water, saline, or alcohol; repeat at least 3 times.

Preparation of the Surgeon, Instruments, and Sterile Field

- Provide sterilized (preferably autoclaved) instruments.
- Don clean laboratory coat or surgical scrub top; remove all jewelry (*e.g.*, rings, bracelets, watches).
- Don a mask and hair bonnet/cap (unless working in a HEPA-filtered cabinet).
- Scrub hands, dry, and don sterile gloves.
- Create a sterile field by covering the surgical site/animal with a sterile drape
- Anything touching the sterile field/drape or the portion of the animal surgically-prepared must be sterile.

Surgery and Intraoperative Monitoring (See Tables 3, 4, and 5)

- Assure appropriate depth of anesthesia prior to incisions.
- Sterile technique and gentle handling of tissues are required.
- The smallest gauge suture material should be selected to perform closure/ligation adequately.
- Perform anesthetic depth and vital sign monitoring at least every 15 minutes.
- Use caution when performing subsequent procedures on multiple animals – do not break the sterile field. Only sterile instruments (including fingers within sterile gloves) may touch the incision site.

Postoperative Care

- Check the animal regularly until it is fully ambulatory.
- Complete surgical records, including anesthetic monitoring.
- Mark cage cards with date of surgery and place a yellow cellophane card in front of cage card.
- Continue and record post-operative care, including daily observations and post-operative analgesia.
- Report complications to the RRF veterinary staff.
- Remove the yellow cellophane card 10-14 days after surgery or when sutures/wound clips are removed.

Note: This Checklist is designed to provide an easily-followed set of recommendations. For more detailed information, the IACUC Policies “Performing Rodent Survival Surgery” and “Rodent Anesthesia” should be reviewed. The RRF veterinary staff is also available for counsel and training.