

Rodent Surgery Checklist

Review the IACUC Guideline on Survival Surgery for details. Consult with CAR veterinary staff (carvets@msu.edu) and CAR training coordinator (cartrain@msu.edu) on surgical guidelines.

Surgery Room/Area

- Clean and disinfect the surface with a disinfectant before each surgery
 - Provide adequate lighting to area for visualizing surgical site and access
 - Provide heat source (recommend: warm water recirculating blanket at medium setting: 37°F)
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Patient Preparation

- Prepare animal in an area separate from the surgical site
 - Remove hair from surgical site with clippers
 - Place non-medicated sterile ophthalmic ointment in eyes
 - Administer pre-operative analgesics
 - Transfer animal to the surgical room/area
 - Position animal using care not to overstretch the limbs or bind them restricting circulation
 - Perform surgical scrub using a skin disinfectant
 - Alternate wiping site up to 3 times the disinfectant agent (i.e. chlorhexidine-based scrub) with ethanol
 - Prepare warm saline or LRS (fluids) for prolonged or invasive procedures
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Preparation of the Surgeon, Instruments, and Sterile Field

- Ensure appropriate instruments have been sterilized
 - Don clean laboratory coat; remove all jewelry (rings, bracelets, watches, etc.)
 - Don a surgical mask
 - Create a sterile area. Cover the surgical site/animal with a sterile drape (transparent recommended)
 - Anything touching the sterile field, drape or portion of the animal surgically prepared, must be sterile
 - Scrub hands, dry, and then don sterile gloves when prepared to begin surgery
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Surgery and Intraoperative Monitoring

- Assure appropriate depth of anesthesia for animal prior to initiating surgical procedure
 - Animal should be nonresponsive to tactile stimuli, toe-pinch, etc with a slowed rate of breathing
 - Ensure sterile technique and handle all tissues with care and precision
 - Perform anesthetic depth and vital sign monitoring while under anesthesia
 - Use caution when performing subsequent procedures on multiple animals.
 - Do not break the sterile field. Use of sterile instruments on each animal.
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Postoperative Care

- Monitor the animal continuously until it is conscious; then every 10-15 minutes until fully ambulatory
- House animal individually until fully ambulatory
- Do not return to housing area animal is in a normal ambulatory and conscious state
- Complete surgical cage cards & update each day for 3 days post-operatively

Report any concerns or complications to the CAR veterinary staff (carvets@msu.edu).