T400-Series Technical Note

Aseptic Surgical Guidelines

The following protocol used at Bowman Gray School of Medicine is consistent with the Public Health Service guidelines.

1. Room Preparation

- A. The surgery table surface should be wiped with a disinfectant before and after use. A bluepad/drape should cover the table.
- B. The use of a heating pad is recommended to prevent hypothermia and to aid in a quicker, uneventful recovery.

2. Animal Preparations

- A. Remove hair from surgical site with clippers or a depilatory.
- B. The surgical site should be cleaned with an antiseptic scrub followed by an antiseptic solution (e.g. chlorhexidine or povidone iodine scrub and solution, respectively).

3. Instrument Sterilization

A. All instruments must be sterilized. The method of choice will be determined by the surgical instruments or devices being used.

4. Surgeon Preparation

- A. The surgeon and all others in the operating room must wear a surgical face mask prior to initiation of animal prep. The surgeon is required to wear sterile gloves; a cap and sterile gown is also recommended.
- B. The surgeon must wear a scrub shirt.

 Non-surgeon personnel in the room must

 wear a lab coat or a gown over their street
 clothes.

5. Draping the Animal

A. Draping material for the rodent includes a 15"x 15" reinforced paper drape and 3"x 3" gauze sponges.

6. Closure of the Animal

- A. Abdominal/thoracic body wall should be closed with absorbable suture material in a simple interrupted or similar interrupted pattern.
- B. Skin should be closed with non-absorbable, monofilament suture material in a simple interrupted or similar interrupted pattern.
- C. Sutures must be removed 7 to 10 days after surgery to prevent inflammation and other postoperative complications.

7. Animal Recovery

- A. Recovery should occur in a warmed environment.
- B. Animals should be observed closely until they are able to maintain a sternal position and then every 6-8 hours until fully recovered.
- C. Post-operative antibiotics should be given after surgery when justified by the investigator and the veterinary staff.

8. Multiple Surgical Procedures

- A. After the first surgery, the sterilized instruments must be kept in a sterile tray containing 70-90% ethyl or isopropyl alcohol or other acceptable solution.
- B. Sterile gloves must be changed between surgeries.



Aseptic Surgical Guidelines Cont.

Aseptic Surgery

- Follow recommended guidelines & common sense. Healthier animals yield better science.
- Sterility: follow aseptic techniques; all instruments and gloves, mask, drapes, implants, sutures should be sterile.
- Use top quality surgical instruments: buying the instruments constitutes an initial investment, but the instruments will last for a long time if properly maintained.

REFERENCE:

Principles of Proper Laboratory Use in Research and Teaching, Wake Forest University, Bowman Gray School of Medicine, 1992



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