State Fair Surgery Suite – Surgeon’s Information

Thank you for volunteering your time and skills at the Surgery Suite this year! A list of participating veterinarians will be posted at the Suite. There will be a full time CVT, Shelley Harpster in charge of the Suite, a volunteer CVT and a veterinary student present to assist. Please read carefully as changes are made on a regular basis.

- **Surgeries are scheduled for 10:00 AM and 12:00 noon for the morning surgeon, 2:00 PM and 4:00 PM for the afternoon surgeon. The AM Surgeon shift is from 8:30 AM to 1:30PM. The PM Surgeon shift is from 1:00 PM to 6:00 PM.** Please bring your own scrubs if you have them. We will have some available if you do not.

- The Animal Rescue will deliver all four patients for the day by **8:00 AM**. The morning surgeon will be assisted by 2 certified veterinary technicians in placing IV catheters in at least 2 patients, and the catheters will be covered with Vetwrap and kept heparinized until post-op. Please also perform a **pre-op physical exam and complete the corresponding form for all 4 animals. Confirm they are intact**.

- Due to our source of animals at shelters, which perform surgeries earlier, you may be expected to perform a spay on a juvenile animal (under 6 months). What to expect with juvenile surgeries is more clear fluid in the abdominal cavity which is normal and a smaller incision that is more caudal due to the reproductive organ elasticity and location (farther away from umbilicus).

- Please take a few minutes to talk to the moderator scheduled for your surgery time slots. Let them know what suture you are using, what the closure technique will be and if there is anything unique about the way in which you perform your surgeries. Also discuss coordinating how you might show a tissue (e.g. ovary, linea alba) on camera to the audience members so that they might better orient themselves as to what the surgeon is doing. There is a speaker in the surgery room so you can hear the moderator and better coordinate transmitting what is happening in surgery to the audience.

- The technicians will perform a CBC, Chemistry, Coag panel and Urinalysis on every patient. If there are abnormal values it will be your decision whether to proceed or try to get a replacement animal.

- See next page for drug protocol. The following anesthetic regime is the standard one for dogs and cats. A pre-op sedative is to be given to dogs 15 minutes before induction time. You may use a different protocol if you prefer, however you are responsible for bringing your own drugs if you require other than what is mentioned below. Please let the head technician, Shelley, know if you want to use a different anesthetic protocol but please note that **the drugs listed are the only ones we have on site**.
**Standard Drug Protocol**

*Premed all patients with Cerenia*

<table>
<thead>
<tr>
<th>Drug</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>B:</td>
<td>Buprenorphine (Buprenex) 0.3 mg/ml</td>
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<tr>
<td>D:</td>
<td>Dexdomitor (Dexmedetomidine) 0.5mg/ml</td>
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<tr>
<td>K:</td>
<td>Ketamine 100mg/ml</td>
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**Anesthetic Protocol**

**Patients >3 months old**

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**Drugs**

Draw up in one syringe and administer intramuscularly

**Dogs:**

- B/D/K: 0.15 ml each/10lbs

**Cats:**

- D/K: 0.2ml each/10lbs
- B: 0.1ml/10lbs

**Female Cats:** do not exceed a 10lbs dose

**Propofol IV to “bump” a cat or dog**

Propofol [10 mg/ml]: 4-6 mg/kg IV to affect

**Reversal:** Antisedan 5mg/ml (reversal of Dexdomitor) – Use an equal volume IM or IV of Antisedan as Dexdomitor was used (0.15-0.2 ml/10lbs IM)

**Local Line Block/Testicular Block**

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<thead>
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<tbody>
<tr>
<td>Dogs:</td>
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<tr>
<td></td>
<td>Female: Bupivacaine 1 mg/lb</td>
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<td></td>
<td>Male: Bupivacaine 1 mg/lb &amp; Lidocaine 2.5 mg/lb combined</td>
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<tr>
<td>Cats:</td>
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<tr>
<td></td>
<td>Female: Bupivacaine 1 mg/lb</td>
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</table>

**Maintenance:** Isoflurane (generally at level 1.5-3.5%)

**Fluids:** LRS (5 ml/kg/hr)

**Monitoring Anesthetic Patient**

- Jaw tone, ocular position, CRT, pulse
- HR: Dogs 50-120 bpm, Cats 100-200 bpm
- RR 8-20rpm
- Pulse Ox>96%
- CVP 3-8cm H20
- Systolic BP 90-160,
- Tidal Volume 10 ml/kg.

**Temperature:** forced air warming blanket, warm bags and fluids.

**Prepare Surgery Suite:**

Enter the surgery only in proper attire (shoe covers, scrubs, cap and mask).

Familiarize yourself with the layout.

Adjust the surgery table to your preferred height and tilt and tell the technician the approximate position you prefer for lights. (The technician will focus the camera once the table is set.) Check to be sure the correct size of gloves and gown are laid out for you and that your preferred suture and blade are chosen (see following equipment list for choices).
**Anesthetic Induction:**
Induction of the animal will be started 20 minutes to the start time of the surgery. IV Propofol will only be administered if needed. **Dose will only be given to effect.**

**Animal Prep:** (done by technician)
Bladder expressed; large wide surgical clip; loose hair vacuumed.
Surgical scrub in 3 cycles of Betadine or Chlorhex and alcohol (alternative Chloraprep skin prep applicator single use). Remove Pulse Ox. Transport animal to surgery and tie on table. Attach Surgivet Patient Monitor. Place Bair Hugger. Final camera adjustment and then one final scrub cycle. Technician will stay with the patient and monitor anesthesia during surgery.

**Surgeon Prep:**
Surgeon prep should begin 10 minutes to the start time of the surgery. Put on scrubs, shoe covers, cap and mask. Please bring your own scrubs if you have them as our supply is limited. Remove all jewelry. The lead technician has a locked drawer if desired. Scrub with soap and brush for at least 5 minutes (time it!). We will also have Avagard surgical hand antiseptic. Dry with sterile towels. Put on sterile gown and gloves with assistance from student or technician. Enter surgery only when all prep is completed.

*Maintain sterility; do not hesitate to regown or reglove.*

**Surgery:**
Let the moderator know in advance what suture patterns and layers of closure you will use. Do at least a 3-layer closure. Skin sutures are used at the veterinarian’s discretion; however, **the shelters prefer subcuticular closure if you are comfortable with this.** Ideally the surgery itself should be done methodically enough to last 30 minutes skin to skin. Slow down if necessary.

*Note: In case of a surgical complication, do not hesitate to prolong the surgery time and/or to make the incision larger. The surgery you are currently performing takes precedence over the following procedures.*

**Post-op:**
Remove drapes and transport animal to prep room for recovery. **Monitor the animal until extubated and recovering,** before removing catheter and moving it to a cage. Animal must be continually monitored by vet techs, vet student or DVM until sternal and maintaining a temp of 99°F or higher. A post-op exam of all patients must be performed by the afternoon DVM prior to 6:00 PM and documented on the corresponding form. If there is a concern for an animal past 6:00 PM, the DVM is responsible for staying with the animal and/or having Shelley contact the U of MN or Animal Rescue to transfer care. Student and technicians are responsible for subsequent clean-up.

**Equipment Available**

<table>
<thead>
<tr>
<th>Emergency Supplies</th>
<th>Ambu-bag and Oxygen</th>
<th>Epinephrine 1:1000</th>
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<tbody>
<tr>
<td></td>
<td>Atropine</td>
<td>Doram 20 mg/ml</td>
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<tr>
<td></td>
<td>Dexamethasone 2 mg/ml</td>
<td>Doram</td>
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<tr>
<td></td>
<td>Lidocaine</td>
<td>Sodium Bicarbonate 8.4%</td>
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<tr>
<td></td>
<td>Antisedan</td>
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</table>

If an animal has complications, it is our policy to treat it to the best of our ability. Keep in mind that we would prefer not to frighten or distress the audience but please weigh this against the fact that the animal deserves an attempt at resuscitation. If there is another emergency drug you want to have available, feel free to bring it with you.
**Surgical Supplies**

**Suture:** Swaged options =
- PDS – 2/0
- Vicryl – 2/0, 3/0
- Nylon – 2/0
- Monomend/Monocryl – 2/0, 3/0, 4/0

**Gauze:** The pack will contain 4x4 Gauze. 2x2 is also available.

**Blades:** # 10 and # 15 blades will be available.

**Instrument Pack:** 4 towel clamps, 1 Brown-Adson forceps, 1 thumb forceps, 4 straight Carmalts, 3 curved Carmalts, 4 Kellys, 4 Halsted mosquitoes, 1 scalpel handle, 1 Mayo scissors, 1 Metzenbaum scissors, 1 needle holder with scissors, and 1 spay hook.

- Needle holders without blades are available wrapped separately.
- Extra small drapes and towel clamps are available for quarter-draping.
- An abdominal retractor is available in case of problems.

If there is another instrument you like to use, feel free bring one for each surgery, wrapped and autoclaved, and remember to take it back with you. Mention the item to the technician as something to possibly obtain for future years.

If you have any comments or suggestions after participating in the surgery suite let us know. We try to improve the demonstration each year and really value input from the participants.

**Thank you for volunteering!**

**SURGEONS:**

If you cannot participate at the last minute for any reason please find your replacement and notify the MVMA immediately.