

**Minnesota Veterinary Medical Association**  
**MVMA office 651-645-7533**  
**Shelley Harpster cell 605-553-0403**  
**2009 State Fair Surgical Suite - Surgeon's Information**

Thank you for volunteering your time and skill at the Surgery Suite this year! A list of participating veterinarians will be posted at the Suite. There will be a paid technician, Shelley Harpster, in charge of the Suite and a veterinary student usually will be present to assist. Although it is not necessary, you may bring your own technician if you prefer additional or familiar assistance. Please read this over each year as changes are made on a regular basis.

1. **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. Please arrive one hour before your first scheduled surgery and be prepared to stay until the animals for which you have been surgeon are extubated and sternal. Please bring your own scrubs if you have them. (We will have some available if you do not.)**
  
2. Humane societies will deliver all four patients for the day by 9:00 AM. The morning surgeon will be assisted by the technician in placing IV catheters in at least 2 patients, which will be covered with Vetwrap and kept heparinized until post-op. Please also do a pre-op physical and check to be sure these are intact females or intact males.
  
3. Please take a few minutes to talk to the moderator scheduled for your surgery time slots. Let him 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 on camera to the audience (e.g. an ovary, the linea alba) so that they might better orient themselves as to what the surgeon is doing. There is a speaker in the surgery suite now so that you can hear the moderator and better coordinate transmitting what is happening in surgery to the audience.
  
4. The technician and student will perform a blood count, a simple clot time & mini-screen chemistry panel on every patient. If there are abnormal values it will be your decision whether to proceed or try to get a replacement animal. Replacements are a lot of trouble, but worth it if you have real reservations about an animal's ability to survive surgery and anesthesia. All dogs/cats that don't already have a subcutaneous ID chip will receive one; the technician will insert it during pre-surgical prep.
  
5. 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 15 minutes before induction time. You may use a different regime if you prefer, however you are responsible for bringing your own drugs if you require other than what is mentioned below (there will also be a bottle of acepromazine at the surgery suite). Please let the technician Shelley know if you want to use a different anesthetic regime.

6. STANDARD DRUG PROTOCOL

Quick Reference Guide & Common Drug Dosages

**NOTE: Be sure to always confirm that the drug concentration matches with the one listed here. Example: Morphine should be 15mg/ml**

**ALL DOSES ARE IN POUNDS (LBS)**

ANESTHETIC/ANALGESIC DRUGS <b>**Treat pain before it occurs**</b>	ANALGESICS Post Op
<p><b>Pre-Op: CATS</b>  Dexdomitor (medetomidine) 1.0mg/ml  <b>(0.01-0.02ml per pound)</b>  Buprenorphine 0.3 mg/ml <b>(0.02 ml per pound)</b>  <b>**Draw up Domitor 1<sup>st</sup>. Mix above in same syringe and give IM</b></p> <p>-----</p> <p>Meloxicam Injectable 1.5mg/ml (max dose 0.2mg/kg SC)</p>	<p><b>CATS:</b>  Buprenorphine 0.3 mg/ml  Send home <b>0.02 ml /#</b>,  given orally under tongue bid x 3 days</p>
<p><b>Pre-Op: DOGS</b>  Dexdomitor (medetomidine) 1.0mg/ml  <b>(0.01-0.02ml per pound)</b>  Morphine 15mg/ml <b>(0.015 ml per pound)</b>  <b>**Draw up Domitor 1<sup>st</sup>. Mix above in same syringe and give IM</b></p> <p>-----</p> <p>Rimadyl Injectable 50mg/ml <b>(0.04 ml per pound)</b>  <b>**Give in separate syringe SC</b></p>	<p><b>DOGS:</b>  Rimadyl  Send home <b>2mg/# PO q24hr</b> or  <b>1mg/# PO q12hr</b>, given with food</p> <p>4 day pack of oral Rimadyl</p>
<p><b>Induction: CATS and DOGS</b>  <b>Mix equal amount in same syringe,</b>  <b>Draw up Valium 1st .</b>  Valium 5mg/ml <b>(0.02ml per pound)</b>  Ketamine 100mg/ml <b>(0.02ml per pound)</b>  <b>**Give IV SLOWLY TO EFFECT</b></p>	
<p><b>Antisedan 5mg/ml</b> (if reversal needed for Dexdomitor)  <b>Emergency:</b> Draw up the same volume as Dexdomitor. Administer ½ the volume IV. Wait one minute, then administer the remaining volume IV.  <b>Do not use atropine!</b>  <b>Non-emergency:</b> Administer the same dose as dexdomitor IM. If more than 45 minutes have elapsed since administration of the Dexdomitor, give ½ the volume IM. <b>Do not use atropine!</b></p>	
<p><b>Maintenance:</b> Isoflurane (generally at level 1-2%)</p>	
<p><b>Fluids:</b> LRS (3 ml/pound/hr)</p>	

<b>Antibiotics:</b> Prophylactic Convenia <b>3.6 mg/lb</b> (8mg/kg) or 0.045 mL/lb given SC and DuraPen 3( <b>0.1 ml</b> per pound IM or SC) 30 minutes before surgery	
<b>Monitoring Anesthetic Patient</b> Jaw tone, Ocular position, CRT, Pulse HR: Dogs approx 50-120 bpm, cats approx 100-200 bpm. RR 8-20 rpm, Pulse Ox>96%, CVP 3-8 cm H2O. Systolic BP 90-160, Tidal Volume 10 ml/kg. Temperature:forced air warming blanket, warm bags and fluids.	<b>[All doses to be adjusted based on circulatory status, age, disposition or co-existing disease]</b>

6. 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, blade, and gauze are chosen (see following equipment list for choices).

7. Anesthetic Induction:

Induction of the animal should be started promptly but not early, while the moderator runs the induction and prep DVD.

Administer IV to effect Ketamine:Valium (1:1)

Be conservative and take into account how sedated the dog is when administering the ketamine/valium. Dose only to effect.

Intubate. Hook up to Isoflurane/Oxygen. Attach IV fluids (LRS) that will run at a slow drip during prep and throughout surgery. Use the Pulse Oximeter to monitor animal in Prep area. If the animal does not already have a microchip, the technician will insert a subcutaneous ID chip and record type and number. Please verify.

8. Animal Prep: (done by technician and student)

Bladder expressed; large wide surgical clip; loose hair vacuumed.

Surgical scrub in 3 cycles of Betadine and alcohol. Please let the technician know if you have a Betadine allergy; we do have chlorhexadine scrub available. 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.

9. Surgeon Prep:

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 technician has a locked drawer if desired.

Scrub with soap and brush for at least 5 minutes (time it!).

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.**

10. Surgery: Let the moderator know in advance what suture patterns and layers of closure you will use. Do at least a 2-layer closure. Skin sutures are used at the veterinarian's discretion; however, the humane societies 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.

There will be a speaker in the surgery suite so that the surgeon can hear the moderator. This will hopefully help communication between the 2 veterinarians and will help the procedure run more smoothly.

11. Post-op: Remove drapes and transport animal to prep room for recovery. Replace the Pulse Oximeter to aid in monitoring the animal during recovery. **Monitor the animal until extubated and recovering**, before stopping fluids and moving it to a cage. Remain in the unit until the dog is sternal and doing well. Student and technician are responsible for subsequent clean-up.

### Equipment Available

<u>Emergency Supplies</u>	Ambu-bag and Oxygen	Diazepam 5 mg/ml
	Atropine	<b>Epinephrine 1: 1000</b>
	Dex Na PO4- 4mg/ml	Dopram
	Lidocaine	Sodium Bicarbonate 8.4%

If an animal has complications it is our policy to treat it to the best of our ability. Do bear 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 =  
Chromic Gut in 0, 2/0 and 3/0  
Prolene in 2/0, 3/0 and 4/0  
Vicryl in 1,0, 2/0 and 3/0  
PDS II in 0, 2/0 and 3/0  
Ethilon nylon in 2/0, 3/0 and 4/0  
Fluorofil in 2/0, 3/0, 4/0  
Monomend in 0, 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 mosquitoes, 1 scalpel handle, 1 Mayo scissors, 1 Metzenbaum scissors, 1 needle holder with blades, 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.**