

Minnesota Veterinary Medical Association

MVMA office – 651-645-7533

Shelley Harpster, CVT – cell 605-553-7451

Dr. Krista Walkowiak – cell 651-308-8160

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 paid technician, Shelley Harpster, in charge of the Suite and a veterinary student 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 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 2:00PM. 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 humane society will deliver all four patients for the day by **8:30 AM**. The morning surgeon will be assisted by the technician 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 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 (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 suite now so that you can hear the moderator and better coordinate transmitting what is happening in surgery to the audience.
- 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. All dogs/cats that don't already have a subcutaneous ID chip will receive one; the technician will insert it during pre-surgical prep.
- 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 technician, Shelley, know if you want to use a different anesthetic protocol.

Standard Drug Protocol

Anesthetic Protocol Patients >2.5 months old	
Drug	Concentration
A: Acepromazine	10mg/ml
B: Buprenorphine (Buprenex)	0.3 mg/ml
D: Dexdomitor (Dexmedetomidine)	0.5mg/ml
H: Hydromorphone	2mg/ml
K: Ketamine	100mg/ml
Draw up in one syringe and administer intramuscularly	
Female Dogs:	D/B/K: 0.15 ml each/10lbs or D/H/K: 0.15ml each/10lbs
Male Dogs:	D: 0.1ml/10lbs H/K: 0.15ml each/10lbs
*Decrease Dexdomitor by 25% for Adult Giant Breeds and Seniors	
Cats:	D/K: 0.2ml each/10lbs B: 0.1ml/10lbs or D/K: 0.2ml each/10lbs H: 0.1ml/10lbs
*Female Cats: do not exceed a 10lbs dose	
*Ketamine/Diazepam IV to “bump” a cat or dog	
Ketamine [100mg/ml] Diazepam [5mg/ml] Puppies: 0.02ml/lbs of each IV slowly Female Kittens: Start with 0.1 ml of each IV slowly Adult Cats: Start with 0.2 mls of each IV slowly	

Patients <2.5 months old	
Dogs:	H: 0.2ml/10 lbs A: .02ml/10 lbs (Hydromorphone 0.1 mg/kg & Acepromazine 0.05mg/kg)
Cats:	H: 0.2ml/10lbs A: 0.09ml/10lbs (Hydromorphone 0.1 mg/kg & Acepromazine 0.2 mg/kg)
Pre-Anesthetic Cocktail (PAC)	
PAC is for treatment of post-op pain & sedation of all patients, or for pre-op sedation of pediatrics. PAC is administered IM or SC 15-30 min. before anesthetic induction for pediatrics.	
Dogs:	0.05ml of PAC/lb, not to exceed 3mls (Butorphanol 0.2mg/kg & Acepromazine 0.05mg/kg)
Cats:	0.1ml of PAC/lb (Butorphanol 0.4mg/kg & Acepromazine 0.1 mg/kg)

***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	
Dogs:	Female: Bupivacaine 1 mg/lb Male: Bupivacaine 1 mg/lb & Lidocaine 2.5 mg/lb combined
Cats:	Female: Bupivacaine 1 mg/lb

Maintenance:	Isoflurane (generally at level 1-2.5%)
Fluids:	LRS (3 ml/pound/hr)

Antibiotics: DuraPen 3 or CombiPen (**0.1 ml** per pound IM or SC) Administered during prep

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 H2O
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 should be started promptly but not early, while the moderator runs the induction and prep DVD.

Administer IV to effect Ketamine/Diazepam (1:1). Be conservative and take into account how sedated the dog is when administering the ketamine/valium. Dose only to effect.

Intubate. Attach tube 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 that the microchip was properly placed by scanning the chip.

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 chlorhexidine 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.

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.

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 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.

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. 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. **Animal will be continually monitored by vet tech, 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 Shelly contact the U of MN or the Humane Society to transfer care. Student and technician are responsible for subsequent clean-up.

Equipment Available

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

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 – 0, 2/0 and 3/0
Prolene – 2/0, 3/0 and 4/0
Vicryl – 1,0, 2/0 and 3/0
PDS II – 0, 2/0 and 3/0
Ethilon nylon – 2/0, 3/0 and 4/0
Fluorofil – 2/0, 3/0, 4/0
Monomend – 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 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.