



Minimizing Anesthetic Risk:

Your pet's safety and comfort are our biggest priorities.

Any time sedation or general anesthesia is performed there is risk. This risk can never be totally eliminated. The goal is minimizing risk. Vetcetera Pet Healthcare Centre minimizes risk by utilizing the following three steps prior to anesthesia:

1. A thorough physical exam the morning of surgery.
2. All pets get some level of pre-anesthetic bloodwork:

Chemistry panel: Most sedatives and anesthetics are metabolized by the liver and excreted through the kidneys. Lack of appropriate liver or kidney function can cause complications such as prolonged recovery or profound sedation and extremely deep levels of anesthesia. A chemistry panel evaluates internal organ function including the liver and kidneys.

Complete blood count: Red blood cells are required to deliver oxygen to the organs and tissue of the body. Platelets are required to stop bleeding. White blood cells are required to fight infection and for appropriate healing. Abnormal levels of any of these cells can cause complications either during surgery or recovery and healing.

Electrolytes: potassium, sodium and chloride are important in normal heart function. Abnormalities in electrolyte levels can cause abnormal heart rhythm while under anesthesia.

Blood gases: allow for evaluation of lung function and serve as a baseline that can be monitored during anesthesia if there are anesthetic complications.

Coagulation profile: Even with adequate platelets, other factors involved in clotting are necessary for your pet's body to effectively stop bleeding. The coagulation profile assures us there is no shortage of these factors.

The tests required for your pet will be determined based on age, breed, procedure being performed and assessed risk.

Having the above information allows us to custom tailor an anesthetic protocol to your pet. While there are general protocols we use for most well patients, no one protocol fits all animals, every procedure or every risk category.

3. Once the results of the physical exam and bloodwork are evaluated the anesthetic protocol is established. Dr. Gloates chooses the anesthetic medications and dose appropriate for your pet. Then, rounds are held so he can discuss your pet's anesthesia with the technician. At that time we clarify any questions. The technician then recalculates the dose of each drug to make sure there are no discrepancies.

The anesthesia is broken down into four steps:

1. Premedication: this is usually a combination of sedative and pain control medication used to calm and relax your pet and to treat pain before it starts. This is called preemptive analgesia and is a very important part of successful pain management. Patient comfort is extremely important. As with anesthetic risk it cannot be completely eliminated but we make every effort to minimize pain.

2. Once your pet is relaxed, we will place an intravenous catheter. The catheter is important for two reasons. First, we administer IV fluids while your pet is under anesthesia to assure adequate blood pressure. It is also important to have access to the blood stream in the unlikely event emergency drugs need to be administered.

3. An injection is given through the catheter to induce anesthesia.

4. Once anesthesia is induced, a breathing tube is placed in your pet's airway to allow administration of oxygen and a gas anesthetic. The gas anesthetic maintains anesthesia during surgery.

Once your pet is under anesthesia, the surgical area is clipped and scrubbed. Your pet is moved into the operating room where the surgical area will be scrubbed again. If your pet is getting dental work done, he/she will be moved directly to the dental area.

He/she is placed on a warmed surgical table. Additional heat may be supplied by using a warm air device called a Bair Hugger. This keeps body temperature up while under anesthesia.

IV fluid therapy is started and the patient monitoring equipment is connected.

Our patient monitoring includes the following:

1. A technician that is by your pets side during the entire procedure monitoring and charting respiratory rate, heart rate, gum color and anesthetic depth.

2. Electronic monitoring: Electrocardiogram (monitors electrical activity in the heart), Blood Pressure, Temperature, Pulse Oximetry (measures oxygen in blood), Capnograph (measures carbon dioxide in exhaled air), Pulse rate, Respiratory rate.

All of this information allows us to monitor anesthetic depth, cardiac function, tissue perfusion and ventilation. Early detection of an issue in any of these areas allows for early intervention and better safety for your pet.

Once the surgery is done, we will typically use our therapeutic laser to reduce inflammation, ease pain and speed healing at the surgical site. This is a two to three minute procedure performed during the recovery phase.

We continue to monitor your pet until he/she is fully awake. We do not anesthetize the next patient until we are confident your pet is awake and stable.

Your pet will be sent home with pain medications appropriate for the procedure performed.

Again, risk cannot be completely eliminated. We do everything in our power to reduce anesthetic risk.

You will no doubt have questions and concerns. We invite you to share them openly with Dr. Gloates or a member of our staff. We will make every effort to address each question and concern so that you can feel confident your pet is receiving the best possible care.

