



Anesthesia and Diabetes

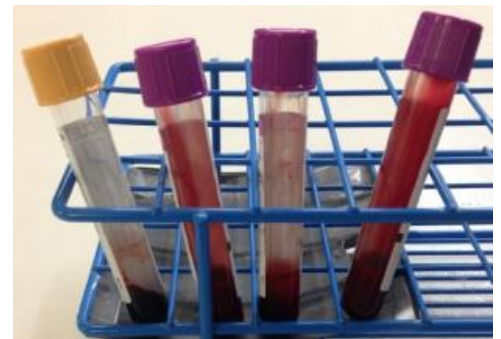
Anesthesia is used to induce a lack of consciousness of a patient to enable medical procedures that otherwise would not be possible in an awake patient. Inhaled and injectable anesthetics are most frequently used. As pain control is very important during an anesthetic procedure for your pet, a multi-modal approach to pain management is used. This may include opioid pain medications, non-steroidal anti-inflammatory pain medication and local nerve blocks when appropriate.



Diabetes is an endocrine or hormone disease where the pancreas does not produce enough or any insulin for the body to use to help metabolize and use sugars as energy sources, resulting in very high blood sugar levels. The most common clinical signs of a diabetic animal are increased thirst, increased urinations, increased hunger, weight loss, vision changes secondary to cataracts or a plantigrade stance in cats (walking sunken on their hocks). Diabetes is treated with insulin administration.

In preparation for an anesthetic procedure, a diabetic patient is regulated and stable. Diabetes regulation is done with blood glucose curves and fructosamine blood level checks.

Once a patient is regulated and a surgical procedure is advised, pre-anesthetic recommendations are discussed to ensure the safety of the patient. A complete blood count assessing the red blood cells, white blood cells and platelets is needed to assess for an anemia, evidence of dehydration, infection, inflammation or possible troubles clotting. A complete biochemistry that assesses spot glucose levels, kidney health, liver health, thyroid health and electrolytes is needed for assessment of current blood sugars and organ health. A urinalysis is important to assess. Sugar in the urine and urinary tract infections are common in diabetic animals. Urinary tract infections can sometimes be difficult to find in a diabetic's urine and therefore a urine culture is often performed to screen for them.



Knowing about concurrent infections in a diabetic animal is critical as these patients have a reduced ability to fight infections and infections will influence how well they are able to regulate their diabetes with insulin. They are stuck in a never-ending cycle!



If an infection is noted prior to the surgical procedure, then antibiotics are often started. Antibiotics are often prescribed after a procedure as well due to the diabetic patient's limited ability to fight infections. A reassessment with a veterinary technician or veterinarian a few weeks after the procedure is recommended to ensure full healing has occurred to the surgical site.



The risk of anesthesia in a well-managed diabetic is similar to a non-diabetic animal of similar health. The most critical time is during the pre-anesthetic period in which fasting is needed for anesthesia. Fasting is required to decrease risk of regurgitation and aspiration into the lungs, but not having food is not ideal for a diabetic patient. The anesthetic protocol and which medications are used and safe is considered when working with a diabetic patient.

During all anesthetic procedure your pet receives IV fluids and is being monitored closely by a registered veterinary technician and licensed veterinarian. Medical readings such as heart rate, ECG of the heart, blood pressure, respiratory rate, temperature, carbon dioxide output monitoring and oxygen saturation of the blood.

When a pet has a known medical condition such as diabetes even more safety precautions and monitoring are taken to ensure the safety of the anesthetized patient. Additional monitoring of the blood glucose levels are taken throughout the anesthetic procedure and a dextrose sugar drip is added if needed. Glucose monitoring is continued once the patient is awake, food is offered in hospital and insulin is given as appropriate. Most patients return to their regular insulin and feeding schedule later that same night.



When preparing for anesthesia with your diabetic pet:

- 1) Feed your pet and administer insulin as usual the night before the procedure
- 2) Only a partial dose of insulin is given the morning of the surgical procedure Please verify the exact dose for your pet prior to the procedure date.
- 3) Food is withheld the morning of the procedure
- 4) NEVER take away water from your diabetic pet.
- 5) Bring with you the morning of the procedure your pet's insulin and needles
- 6) Bring with you the morning of the procedure their regular food so we may feed them once they are awake from anesthesia



We know anesthesia can be a nerve-wracking time for pet parents. You pet's safety, comfort and health are our number one priority. Thank you for entrusting the care of your loved one with Nanaimo Veterinary Hospital.