

To be able to completely and thoroughly examine all tooth surfaces and perform necessary dental x-rays, cleaning, or oral surgery, anesthesia is necessary. This is also the part that causes the most worry for pet owners, so we will outline how anesthesia is administered and monitored so that you will have a better understanding of how safe it is.

Preanesthesia exam: Prior to any anesthetic procedure, your pet is given a physical examination. We weigh them, take a body temperature reading, and check the color of the mucous membranes. We listen to the heart and lungs, and get a baseline heart and respiratory rate. Any abnormalities in the physical exam could indicate the need for further evaluation such as chest or abdominal radiographs or ultrasound.

Preop blood work: If it has not already been done, blood is drawn for analysis of the blood cell counts, and to check for chemical measures of liver and kidney function, blood proteins, glucose, and electrolytes. This allows us to detect any hidden organ dysfunction, and to alter our anesthetic plan if necessary. Specific tests to check for conditions indicated by the physical examination may also be evaluated at this time.

Preanesthetic sedation: Prior to catheter placement, most pets are given a medication that acts as a mild sedative and analgesic. This helps to relax them and relieve anxiety, as well as pre-empt any pain.

IV Catheter: The area over a leg vein is clipped of hair, and cleaned and disinfected. A sterile catheter is placed in a vein to allow for injection of anesthetic medications or other drugs, as well as IV fluids.



Anesthesia induction: An anesthetic drug is administered through the IV catheter to cause relaxation so that an *endotracheal tube* can be inserted in the trachea. These anesthetic agents are short-acting in their effects, usually just long enough to allow for gas anesthesia.

Inhalant anesthesia: This is the mixture of isoflurane anesthetic gas and oxygen that is used to maintain anesthesia throughout the procedure. Isoflurane is a human anesthetic that is very safe and allows them to wake up very quickly after the procedure is completed.

Anesthetic monitoring: Sophisticated electronic monitoring equipment is used to closely monitor your pet's condition during anesthesia. This includes EKG, respirations, pulse oximetry, blood pressure and body temperature. A veterinary assistant is present at all times to monitor your pet's vital signs and the level of anesthesia.



Regional Anesthesia: For patients having oral surgery or extractions, regional nerve blocks are administered prior to the procedure. This numbs the area, allowing us to use a lower level of general anesthesia, and aiding in post-op pain management.

Anesthetic recovery: After the procedure is completed, we continue to monitor your pet until fully awake and able to stand. The length of the anesthetic recovery varies depending on the length of the anesthesia and the type of pain medications given.

Post-op pain management: We employ multi-modal pain management. This means that we use multiple agents that act to reduce pain by different mechanisms. By combining these drugs we can achieve a better level of pain control with fewer side effects. A patient may be given liquid medications, small tablets that can be disguised in food, or pain medication delivered through a transdermal patch or topically applied.

