Explanation of Anesthetic and Surgery Related Procedures

Pre-anesthesia Blood Testing- Before putting your pet under anesthesia/sedation, we will perform a physical exam. We also recommend that pre-anesthetic blood testing be performed to maximize patient safety and alert the doctor to the presence of any undetected disease that could complicate the procedure. The results of these tests may be useful to develop faster, more accurate diagnosis and treatment if you pet's health changes. We recommend this procedure for all patients. It is especially important for the pet that has never had blood work done, has known medical problems or patients older than 7 years old. This test requires a small amount of blood the morning of the procedure. This procedure includes measuring red blood cell levels, hydration status, and liver and kidney functions. (see following)

"Packed Cell Volume (PCV)"- We will measure the PCV (% red blood cells) to make sure your pet is not anemic before starting the procedure. Some blood loss occurs during most surgical procedures. We do not want to begin a non-emergency surgery on a patient with a low PCV. A presurgical level is also important if excessive bleeding occurs during surgery or if we suspect bleeding internally after surgery in that we can compare post surgical PCV level with presurgical PCV levels.

"Total Protein"- We will determine the Total Protein content of the serum to make sure your pet is adequately hydrated. A dehydrated patient undergoing anesthesia could potentially result in kidney failure. Total protein is also important in interpreting the PCV level.

"Liver Enzymes"- We will measure the ALT liver enzyme to make sure your pet's liver is functioning well enough to metabolize the anesthetic agents used during surgery and produce clotting factors that are necessary to cause the blood to clot during surgery. Deficiencies of these factors can result in the need a transfusion or death if the blood loss is not detected early enough. If this is an elective procedure and the ALT is elevated, we will recommend not performing the surgery until the ALT is normal. If the surgery needs to be performed immediately, we will make sure we are using anesthetic agents that are not metabolized by the liver. The liver also produces good clotting factors. If liver parameters are elevated, blood-clotting times may need to be evaluated before performing surgery.

"Kidney Parameters"- We will measure the BUN level to make sure your pet's kidney function is normal. Along with the liver, the kidneys also are important in eliminating some anesthetic agents. During anesthesia, the heart rate slows which causes decreased blood flow to the kidneys, which can potentially damage the kidneys. It is important to know how well the kidneys are working before anesthesia in case a patient starts exhibiting signs of kidney failure in the post-surgical period. Ideally, IV fluids should be administered during anesthesia to help maintain blood pressures.

Intravenous Fluids- We believe an IV catheter should be placed and fluids administered to any patient with marginal kidney function, any older patient, any cardiac patient, or any patient undergoing anesthesia for long surgeries. Administering IV fluids during surgery helps maintain good blood flow to all organs and tissues during anesthesia as well as provides ready access to a vein in case drugs may need to be rapidly given for cardiac arrhythmias, altered heart rates or cardiac arrest.

Pain medications- Any procedure in which tissue is incised will result in some pain during the post-operation period. The more extensive the surgery, generally the more pain the patient will experience. We believe orthopedic surgeries, open abdominal procedures (including spays), mature dog neuters, declaws, dental extractions and larger tumor removal procedures should all receive pain medications. Animals express pain in various means that include vocalizing, being withdrawn, lack of appetite, being restless, licking at the surgery site, and not wanting to move. The doctors and staff at Oakbrook Animal Hospital are concerned about the comfort and care of your pet at all times, especially following a surgical procedure. While anesthetic agents provide initial pain-relief post-operatively, giving additional analgesics will further ease you pet's discomfort during recovery. Ongoing research suggests that better control of post-surgical pain actually facilitate the healing process and decreases complications. We are pleased to be able to offer our patients the latest in pain management medication.

ECG & Pulse oximetry anesthesia monitoring- While your pet is under anesthesia, its respiration and heart rates will be periodically monitored by a technician. An ECG allows accurate monitoring of heart rate and identifies potential life threatening arrhythmias. A pulse-oximetry measures heart rate as well as oxygen concentration of the blood. These monitoring devices provide continuous monitoring and alert the doctor of changes in your pet's condition much quicker than would be detected without. We recommend them on all pets undergoing anesthesia.