

Anesthesia and Greyhounds

Most Greyhound owners are aware that Greyhounds can have some special anesthetic issues, but fear of anesthesia should never prevent you from seeking proper care for your hound. There have been remarkable advances in anesthetic safety and, while we can never guarantee the outcome of an anesthetic procedure, the anesthetics available today are generally much safer than most we have had in the past.

Prior to anesthesia, your vet may recommend any or all of these precautionary procedures:

- Screening lab work - to detect hidden underlying problems that might complicate anesthesia, or guide which anesthetic would be used.
- Chest x-ray - for the delicate seniors or those with abnormalities related to the chest.
- IV catheter and perioperative fluids - this maintains normal blood pressure and normal perfusion to vital organs like the kidneys during anesthesia, and it also provides an immediate portal for drugs in case of an emergency.
- Home medications - your vet may have you begin antibiotics or pain medication at home before the actual anesthetic procedure.

It is important to understand that there is no single safe anesthetic protocol for Greyhounds.

With many agents to choose from, the safest anesthetic is the one your vet is comfortable using. Here are some examples of drugs and comments:

BARBITURATES - NEVER use a thiobarbiturate anesthetic in a Greyhound. They are far less common these days, but still available. NEVER EVER use this category of anesthetic on a sighthound.

PRE-ANESTHETIC MEDICATIONS - these drugs are used shortly before the actual anesthetic is administered to provide some early pain relief and a calming light sedation. Often, a combination of medications are given. By using these drugs, a lower dose of anesthetic agent can be used, and that makes the whole process safer. Examples of acceptable pre-anesthetics for Greyhounds are:

- Acepromazine (50% or less dose)
- Medetomidine
- Butorphanol (75-80% dose)
- Morphine
- Atropine
- Buprenorphine
- Glycopyrrolate

INDUCTION AGENTS - these drugs are used to provide a very brief, but rapid, onset of anesthesia. This allows the patient to relax enough to be intubated - a breathing tube is passed down their windpipe to provide the gas anesthetic and oxygen for the duration of the procedure. Examples of acceptable induction agents for Greyhounds are:

- Telazol (75-80% dose)
- Ketamine/Valium
- Propofol

INHALATION ANESTHETICS - these agents are what maintains your Greyhound under anesthesia for the bulk of the procedure. They are vaporized and mixed with oxygen, and then inhaled into the lungs. Older inhalants like metofane and halothane should be avoided. Either of these two inhalation anesthetics are considered safe for Greyhounds:

- Isoflurane
- Sevoflurane

MALIGNANT HYPERTHERMIA

A rare complication of anesthesia in Greyhounds is an emergency condition called malignant hyperthermia. With MH, their body temperature rises very rapidly immediately after an anesthetic. Temperatures above 106.0 can occur and, unless caught and treated, can lead to death within 90 minutes. This condition is thought to be genetically predisposed so if you know of littermates who have experienced it, extra precautions should be taken with your hound. The anesthetic agents often mentioned (but not the only ones) with the onset of this syndrome are succinylcholine and halothane.

Should this syndrome begin, every effort must be made to cool the Greyhound. A drug called Dantrolene is best to treat the emergency. Great caution should be taken with any future anesthetic procedure with a MH Greyhound.

MUSCLE FASCICULATIONS - As they awaken, some Greyhounds experience marked muscle "fasciculations" (tremors). Because of their powerful muscles and large muscle mass, these fasciculations can also cause a temperature rise. This temperature spike is much more easily controlled than MH, and can be mistaken for MH when it isn't.

The information on this page is for educational purposes only and should never be used as a substitute for seeing your own veterinarian, with your pet, for a complete examination and individually prescribed treatment.