Sighthounds

Your Rhodesian Ridgeback is a sighthound, meaning he pursues prey by sight, not smell like the majority of hounds. Other canines in the sighthound class include greyhounds and salukis. These dogs are long and lean, which can predispose them to hypothermia during anesthesia, which means their body temperature becomes quite low. According to a study conducted by the Tufts University Department of Pharmacology and Experimental Therapeutics, blood differences in sighthounds can "complicate" interpretation of pre-anesthetic blood work.

Anesthetics

Anesthetic drugs that fall into the barbiturate class pose the most risk for Rhodesian ridgebacks. If given these medications, recovery from anesthesia takes much longer, as these drugs remain in the Rhodesian's liver for a long time. According to Tufts University, safe anesthetic management of sighthounds includes giving them sedatives prior to anesthesia along with analgesics after the surgery to minimize stress. It recommends using propofol, a ketamine/ diazepam combination, and methohexital as intravenous anesthetics in sighthounds. Because of the risks of hypothermia, a Rhodesian undergoing surgery must have his body temperature monitored closely. Tufts advises that techniques for hypothermia minimization must be used during surgery and the initial recovery period.

Before Surgery

As the Washington State University College of Veterinary Medicine points out, certain breeds are sensitive to particular anesthetic drugs. Relatively few scientific studies exist on specific breed sensitivities, so most of the information comes from veterinary experience. Sensitivity to a particular anesthetic varies in individual dogs from the same breed. Before surgery, your vet conducts a thorough medical history of your dog. She might order tests, such as X-rays or ultrasounds, to make sure your dog is healthy enough to undergo surgery. Your vet will discuss the types of anesthesia she'll use. Modern anesthetic drugs are safer than those used in the past, but there's always a risk factor.