This study describes a minimally invasive percutaneous technique for thyroarytenoid lateralization in cadaver dogs.

Thyroarytenoid Lateralization

Surgery is indicated for dogs with laryngeal paralysis that have moderate-to-severe clinical signs or decreased quality of life. The goal of surgery is to decrease laryngeal resistance by manipulating structures obstructing the rima glottidis. Several surgical techniques have been described, but morbidity and mortality in affected dogs is high, even with surgical treatment. This study describes a minimally invasive percutaneous technique for thyroarytenoid lateralization in cadaver dogs. Two 18-gauge, 1.5-inch needles were placed from the skin and directed through the thyroid and arytenoid cartilages into the laryngeal lumen. The landmarks for needle placement were easily palpated. Nylon 2/0 suture was passed into the laryngeal lumen. The landmarks for direct needle and suture location and penetration of the endotracheal tube (2/11). Further evaluation of this alternative technique is warranted.

Commentary

Surgical intervention is a requirement for dogs with laryngeal paralysis that cannot be controlled medically and must sometimes be done emergently. This procedure may offer an efficient, less invasive approach to stabilize these patients. However, considering the frequent complications encountered in this study, further refinement is warranted before clinical use in patients.

— Jason Bleedorn, DVM, DACVS

Source