Transthoracic Esophagotomy for Foreign Body Retrievals


**ABSTRACT:** In this retrospective study from a referral practice in England, the medical records of 14 dogs that had undergone transthoracic esophagotomy for foreign body retrieval were reviewed to determine the associated complications and outcome. The mean age of the variably-sized dogs was 5 years. In 13 cases, the owners had observed ingestion of the foreign body. A lateral thoracic radiograph was diagnostic for the condition, and endoscopy failed to remove or advance the foreign object in all cases. Bones were the most common (11 cases) ingested object.

Left lateral thoracotomy was performed in all cases—most frequently (eight cases) at the eighth intercostal space. Five dogs had an esophageal perforation. A longitudinal incision was made overlying the foreign body, and the object was removed by gentle manipulation. The esophagus was closed in two layers, and a temporary thoracostomy tube was used to evacuate the chest. Three dogs had pleural effusion, and indwelling tubes were used until the drainage ceased. Postoperative complications (i.e., pyothorax, subcutaneous seroma) were treated and resolved in two dogs. One dog was euthanized at surgery because of pyothorax, mediastinitis, and pleural effusion. The 13 remaining dogs began eating 3 days after surgery, and 11 owners (mean follow-up: 15 months) described their dogs as normal. The authors concluded that surgery was an effective treatment because it provided a 93% recovery rate.

**COMMENTARY:** Esophageal foreign body ingestion can cause high morbidity and mortality rates in dogs. Nonsurgical retrievals are often attempted before surgery because of complications historically associated with poor healing of the esophagus and because of the increased use of endoscopy by clinicians. Some surgeons advocate the use of muscular or omental patches to augment single- or double-layer esophageal closures. The results of this study reveal a high recovery rate in surgical patients and minimal complications in cases involving perforation and unsuccessful endoscopic retrieval. It is interesting to note that the authors performed repeat esophagoscopy on the first eight dogs that survived surgery at a mean time of 6.6 days, and all had evidence of healed mucosal incisions.

Predicting Severe Hyperkalemia in Male Cats with Urethral Obstruction via Historic and Physical Parameters


This retrospective study evaluated historic and physical parameters as alternative or adjunctive predictors of hyperkalemia when serum potassium concentrations cannot easily be measured. The medical records of 223 male cats that presented with a first occurrence of urethral obstruction were reviewed for signalment, medical history,
indoor or outdoor lifestyle, body weight, clinical signs, and physical examination findings. (A companion article discussed renal function, blood gas, and electrolyte test results.)

Four historic and clinical parameters—first-time diagnosis of obstruction (in 75% of cats), indoor (83%) or outdoor (16.5%) lifestyle, anorexia (60%), and vomiting (51%)—had significant associations with hyperkalemia. Despite these significant associations, the use of these parameters in predicting hyperkalemia was poor. Five physical variables—rectal temperature (hypothermia in 50%), heart rate (bradycardia in 23%), respiratory rate (depressed in 38%), presence of arrhythmia (in 11%), and weak pulse (in 15%)—also showed significant associations with hyperkalemia. (Arrhythmia and weak pulse, which were evident in few cases, were not analyzed further.)

**Key Finding:**
- Relatively objective parameters of rectal temperature, heart rate, and respiratory rate were the best predictors; combining temperature and heart rate for analysis showed no advantage. A range of provided cutoff points can help practitioners interpret results. Confirmation of heart rate and rectal temperature as diagnostic is warranted.