

Retrieval of a Foreign Body through Thoracic Oesophagotomy in a Shih Tzu Dog

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Abstract: A 4-year-old intact male dog was brought to small animal outpatient surgery ward at Madras Veterinary College Teaching Hospital with a anamnesis of acute vomiting post feeding and progressive anorexia with dehydration. Clinical examination revealed absence of palpable foreign body at the cervical esophagus. Lateral and ventrodorsal thoracic and abdominal radiographs were taken which revealed radio opaque foreign body at the level of 8th intercoastal space. Hemato biochemical profile were done to rule out any deformity that revealed mild anaemia, hypoproteinaemia and marginal increase in alanine phosphatase levels. Emergency thoracic esophagotomy was planned. Premedication was done with diazepam @0.25 mg/kg and butorphanol @0.2 mg/kg intravenous respectively. Induction was done with propofol @4 mg/kg i/v. atracurium @200 microgram/kg/iv was given as a neuromuscular blockade. The animal was maintained under IPPV following which thoracotomy was performed at 8th intercoastal space and the foreign body was retrieved. The thoracotomy wound was closed as per standard protocols. Appropriate dressing and post-operative care were given. The animal had an uneventful recovery.

Keywords: Intra Thoracic Oesophageal Foreign Body-Thoracotomy-Retrieval -Dog

Esophageal foreign bodies are a common clinical disorder which can become life threatening in dogs (Sale and Williams, 2006). The frequently encountered esophageal foreign bodies are bones, balls, fish hooks, raw hide, wooden sticks, toys, pieces of plastic or metal and other varied objects have been also reported (Thompson et al., 2012). Mostly seen clinical symptom in dogs having esophageal foreign body is regurgitation, gagging and retching following feeding (Leib and Sartor, 2008). Common clinical signs associated with esophageal foreign bodies include retching, regurgitation of food and water, ptyalism, anorexia, restlessness and cervical pain. Less common presenting complaints include dyspnea, cough, and lethargy. Clinical signs of gastrointestinal foreign bodies may be less pronounced than with esophageal foreign bodies and may be intermittent.

A 4 year old intact male dog was brought to Small Animal Outpatient Surgery Unit at Madras Veterinary College Teaching Hospital with a anamnesis of acute vomiting post feeding and progressive anorexia with dehydration. Clinical examination revealed absence of palpable foreign body at the cervical esophagus. Lateral and ventrodorsal thoracic and abdominal radiographs were taken which revealed radio opaque foreign body at the level of 8th intercoastal space. Hemato biochemical profile were done to rule out any deformity that revealed mild anemia, hypoproteinaemia and marginal increase in alanine phosphatase levels. Emergency thoracic esophagotomy was planned. Premedication was done with diazepam @0.25 mg/kg and butorphanol @0.2 mg/kg intravenous respectively. Induction was done with propofol @4 mg/kg i/v. atracurium @200 microgram/kg/iv was given as a neuromuscular blockade. Anesthesia was maintained with isoflurane with oxygen in a closed breathing circuit. The animal was maintained under intermittent positive pressure ventilation following which

thoracotomy was performed at 8th intercoastal space. The thoracic esophagus was identified and the foreign body was explored. Incision was made on the esophagus cranial to the obstruction. Exudates from the lumen was aspirated with a suction pump. The luminal health was ascertained through subjective analysis and the intraluminal foreign body was retrieved. The esophageal mucosa was opposed with simple interrupted sutures using PGA -2-0 with the knots placed intraluminally. The thoracotomy wound was closed as per standard protocols. Food was withheld for 72 hrs and was maintained under fluid therapy for a week. Appropriate dressing and post operative care were given. The animal had an uneventful recovery.

It has been reported that localization of esophageal foreign bodies in dogs is mostly thorax entrance or thoracic area (Moore, 2001) as observed in the present case and common observed esophageal foreign bodies are bone, chew treats, balls, toys, fish pole and metal, plastic or wood pieces have been noted in dogs (Thompson *et al.*, 2012). In this case, bone and bone pieces were removed through thoracotomy followed by thoracic oesophagotomy in as also performed and observed with previous reports (Sale and Williams, 2006). Mostly seen clinical symptom in dogs having esophageal foreign body is regurgitation following feeding (Leib and Sartor, 2008) which was in accordance with the present case. Clinical signs can include vomiting, hematemesis, anorexia, lethargy, abdominal pain, or the foreign body may be an incidental finding. Physical examination may reveal ptyalism and cervical discomfort in pets with an esophageal foreign body. (Gianella *et al.*, 2009) Gastrointestinal foreign bodies may have a normal abdominal palpation, or there may be a suspicious region felt or painful area noted. Electrolyte abnormalities are common with gastrointestinal foreign bodies, including, in order of most to least common, hypochloremia, metabolic alkalosis, hypokalemia, and

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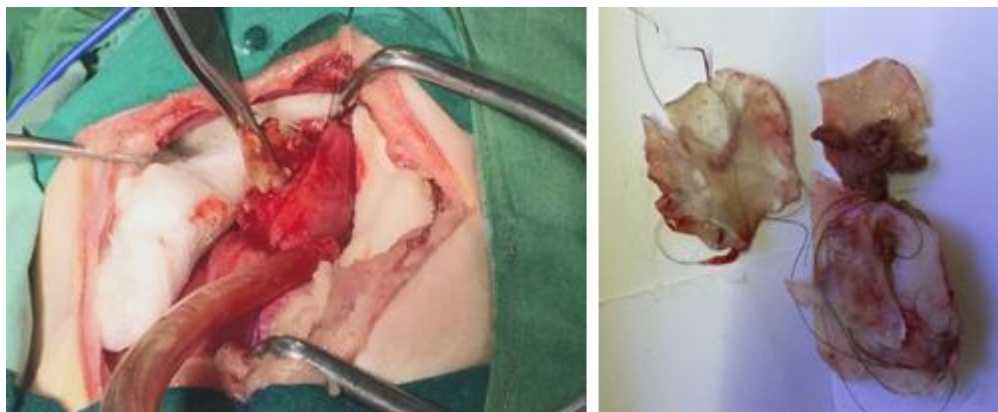
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hyponatremia; hyperlactatemia is also common. In the present case, appropriate fluid therapy was administered to counteract electrolyte imbalance.



Thoracic Esophagotomy – Retrieved Foreign body



Lateral and Ventro Dorsal Radiograph – Radio Opaque Foreign Body – Bone

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