ULTRASONOGRAPHY & COMPUTERIZED RADIOGRAPHY AIDED DIAGNOSIS OF OESOPHAGEAL FOREIGN BODY OBSTRUCTION IN A BUFFALO


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Introduction: Oesophageal disorders are relatively uncommon in ruminants. Intra-luminal blockade of the oesophagus, popularly known as choke is the most common oesophageal disease in large animals. Most ruminants which suffer from this condition are greedy feeders or having NUTRITIONal deficiencies, which makes them eat foreign bodies.

Objective: Many oesophageal foreign bodies are radiopaque and can be seen on plain radiographs, while radiolucent foreign bodies are difficult to diagnose. Oesophageal ultrasonography in buffaloes has been rarely reported. We have assessed the potential value of ultrasonography for the diagnosis of oesophageal foreign body obstruction in a buffalo.

Material and methods: A murrah cross buffalo presented to the department with history of anorexia and inappetance since last ten days. The animal was unable to swallow the feed material but could drink water with discomfort. Clinical examination revealed mild toxemic signs. The foreign body was felt in the mid cervical oesophagus on the left side upon palpation. The computerized plain radiography of the cervical region of neck was performed in standing position, followed by B mode ultrasonography of left and right ventral neck regions using 15 and 18 MHz linear probes. The oesophagus was visualized from left jugular furrow in a longitudinal plane with a slight dorso-median or horizontal scanning.

Results and discussion: Lateral radiograph revealed regional intra-luminal mass due to the presence of radiolucent foreign body in the mid cervical oesophagus. Ultrasonographically, the normal portion of oesophagus appeared as a band-shaped structure in longitudinal section, with hyperechoic centre associated with intra-luminal mucus and air. An echogenic posterior shadowing, non anatomic structure was seen in the lumen of oesophagus and the oesophageal wall was oedematous in case of obstructed portion. No abnormal blood flow or murae was found in oesophagus wall. Cervical oesophagotomy was performed and a large, wrinkled leather piece was retrieved from the oesophagus.

Conclusion: Computerized Radiography is helpful in diagnosing the radiolucent foreign body in oesophagus, whereas ultrasonography is an ideal diagnostic tool for investigating oesophageal obstruction in buffaloes. It can also be considered to be a valuable supplementary aid to clinical examination and, in many cases, can facilitate diagnosis.

Keywords: Ultrasonography; Computerized Radiography; Oesophageal Foreign Body