MANAGEMENT OF OESOPHAGEAL OBSTRUCTION DUE TO PHYTOBEZOARS IN A CATTLE

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The oesophagus is a musculo-membranous tube which connects the pharyngeal cavity to the stomach. It is divided into cervical, thoracic and a very small abdominal part (Sisson and Grossman, 1967). Oesophageal obstruction occur in cattle due to foreign body or feed particles (O' Connor, 1965; Singh *et al.*, 1993), trichobezoar and phytobezoars (Radostits *et al.*, 2000). Intraluminal blockadge of the oesophagus, popularly called choke, may occur due to vegetables (e.g. turnip), fruits (e.g. large size lemons and apples), phytobezoars and various foreign bodies. Extraluminal causes; large perioesophageal abscess, enlarged mediastinal lymph nodes and tumours, may also lead to partial obstruction of the lumen of the oesophagus due to pressure. In ruminants, obstruction occurs mostly in the cervical region and however, obstruction of the thoracic oesophagus is rare.

Case history and observation

A cattle was presented in TVCC, Bikaner with a history of stretched neck and swelling in the ventral neck region with inability to swallow feed and water. The patient remained thirsty and made attemps to drink water which often returned back through the nostrils carrying food particles with it. Based on the clinical observation and history it was diagnosed as obstruction (Phytobezoars) in oesophagus with the confirmation after plain (Computed) radiograph. Computed radiograph reveals an oval shape mass (Fig. 2) in oesophagus.

Treatment and Discussion

Restrainig the cattle in lateral recumbency and applying mouth gag (Fig. 1). A conservative treatment was aimed at reducing the oesophageal spasm and to dislodge the obstruction by external or internal spasm and to dislodge the obstruction by external or internal manipulations.Once the spasm of the oesophagus was controlled and some degree of relaxation was achieved, it was possible to clear the cervical obstruction by placing the thumb or fingers distal to the foreign body and gradually forcing it upwarded until it reached the pharynx. The phytobezoars was removed with the help of fingers. Xylazine sedation (0.1mg/kg b.wt. i/m) was used for relaxation of oesophagus. Animal was administered inj. streptopenicillin 2.5 gm and inj. phenyl butazone 3 mg/kg body weight i/m for 5 and 3 days, respectively. Animal was cured. Obstruction of oesophagus occurs mostly in the cervical region and obstruction of the thoracic oesophagus is rare in ruminants (Singh *et al.*, 1993). The foreign body, which might have been passed initially to the rumen, could have come back during the act of rumination towards the mouth and caught half way (Ramadan and Abdi-Bey, 1990). The high incidence of cervical obstruction might support the idea that oesophagus in the caudal cervical region was narrower than earlier region or the pressure exerted by the first rib and the trachea could act as a predisposing factor (O'

Fig. 1: Restrainig the cattle in lateral recumbency, applying mouth gag after xylazinesedation and removing phytobezoars

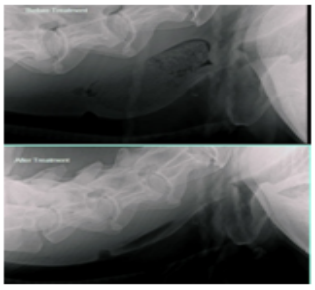

Fig. 2: Plain (Computed) radiogarph before and after removal of phytobezoars

Connor, 1965). The undigested plant fibres of fodder and hairs may be rolled during ruminal contraction into ballscalled trichophytobezoars and such animals consumed little concentrate feed in comparison to others (Reddy *et al*., 2003). These trichophytobezoars are usually rounded and smooth, but some are convoluted like the surface of the cerebrum (Jubb and Kennedy, 1963; Runnels *et al*, 1976). However, in the present paper an oval and smooth phytobezoar was recovered. In agreement with Singh and Nigam (1980), radiographic observation was advantageous to ascertain the site and the nature of the foreign bodies which either migrated or lodged in the various regionsthis means, radiography proved to be an essential diagnostic tool.

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