Endoscopic Diagnosis of Pharyngeal Laceration in a Cow- A Case Report

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Abstract
A four year old cow with a history of inappetence and drooling of saliva, dysphagia, ptyalism, pain in the pharyngeal area and extended head and neck was presented. Endoscopic examination revealed laceration in the caudal pharyngeal area. The animal was treated with ceftiofur and flunixin for five days. The animal recovered uneventfully following treatment.

Key words: Endoscopy, pharyngeal tear, Cow

Natural or iatrogenic pharyngeal trauma commonly results in gastrointestinal and respiratory consequences in affected cattle. Coarse or fibrous feeds, awns and metallic foreign bodies occasionally cause pharyngeal punctures or lacerations. But the most common cause of pharyngeal trauma in dairy calves and cattle is iatrogenic injury. Inappropriate, rough or malicious use of balling guns, paste guns, oesophageal feeders, Frick speculum and stomach tubes are the usual causative instruments (Divers and Peek, 2008). This article describes about endoscopic evaluation of pharyngeal laceration in a cow.

Case History and Observation
A four year old cow was presented to the Large Animal Medical Unit of Teaching Veterinary Clinical Complex, Namakkal with a history of anorexia and drooling of saliva. Clinical examination revealed dysphagia, ptyalism, pain in the pharyngeal area and extended head and neck. There was enlargement of submaxillary and pharyngeal lymph node, jowl & brisket oedema. Respiratory rate, temperature and heart rate of the cattle were within the normal limit. Radiography of thoracic region did not reveal any penetrating foreign body. Fine needle aspiration biopsy of enlarged lymph node revealed only inflammatory cells. Video endoscopy was performed with physical restraint in standing posture. The endoscope was passed through the nasal cavity and the pharynx was evaluated. About 10 cm x 3cm pharyngeal laceration was noticed through video endoscopy (Fig.1). To facilitate optimal visibility, insufflation of air for unrestricted movement of the tip of endoscope was done. The endoscope was then advanced into the oesophagus and was found to be free from lesions.

Treatment and Discussion
The animal was treated with ceftiofur (@ 2.2mg/kg.b.wt IM) and flunixin (@ 0.5mg/kg.b.wt IV) for five days. The animal recovered uneventfully following treatment. Injury to the pharynx, larynx and cranial portion of the oesophagus could occasionally occur in large animals and was caused by the ingestion of sharp foreign bodies or by the improper use of balling guns, nasogastric tubes, or dose syringes in cattle and horses (Adams and Radostits, 1988). In the present study there was history of administration of calcium gel through bottle with extended neck like adapter. The faulty drenching procedure could have caused the pharyngeal trauma in this case. Direct tissue trauma has been quickly complicated by cellulitis or phlegmon of the retropharyngeal tissue. Clinical signs included salivation a “sore throat” as evidenced by extended head, fever, foetid breath, soft tissue swelling in the throat latch, dysphagia or anorexia and localised or diffused pharyngeal pain (Divers and Peek, loc.cit) which are in concurrence with the reports of the authors. Endoscopy was a helpful ancillary aid when a manual examination of oral cavity was inconclusive or when the size of the animal precludes

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manual examination (Mann et al., 2013 and Smith, 2014). Broad spectrum antibiotics (Ceftiofur, tetracycline or ampicillin) analgesic and supportive measures such as intravenous fluids were the major components of the therapy for pharyngeal trauma. In the present study, endoscopy was highly useful in identifying the laceration in pharyngeal wall and helped in identifying the lesion. Hence, endoscopic evaluation of pharynx and oesophagus has to be carried out in all the cases of cattle with dysphagia, dyspnoea, ptyalism and regional lymph node enlargement.

**Summary**

A case of endoscopic diagnosis of pharyngeal laceration in a cow is placed on record.

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**References**


