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Rumenotomy and Caesarean Section in a Cow Affected with Ruminal Impaction and Uterine Torsion

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A B S T R A C T

A six year old crossbred HF cow was presented to the Veterinary Clinical Complex, the history of no faecal output from the last 4 days along with anorexia. Animal was full term pregnant. Palpation of the rumen from left paralumbar fossa and per rectal revealed severely impacted rumen. Per-vaginal examination revealed post-cervical right sided uterine torsion of approximately ≥180 degree. Based on the findings of clinical examination, the diagnosis of ruminal impaction and post-cervical right side uterine torsion was confirmed. Rumenotomy and caesarean section were performed under local analgesia from the left paralumbar fossa and it was concluded that performing rumenotomy followed by caesarean section was an appropriate method to relieve both the ailments with minimal stress to the animal.

Introduction

Rumen impaction is among the most common cause of gastrointestinal disorders in ruminants (Ismael *et al.,* 2007 and Bakhiet 2008). The process of fermentation and mixing of contents inside the rumen is hindered by the ingestion of non-metallic foreign bodies such as, plastics, ropes or leather pieces, leading to indigestion (Radostitis *et al.,* 2000 and Braun *et al.,* 2007). Moreover, the degradation of polythene and other plastic materials does not occur inside the rumen/reticulum and due to churning movements inside the rumen.

They become large tight balls which eventually leads to impaction where animal passes scanty or no faeces (Ramaswamy and Sharma, 2011). Poor quality roughage also

leads to ruminal impaction especially in animals with depraved appetite (Tyagi and Singh, 2004).

Rumenotomy is advocated for treatment of severe/ long standing cases of ruminal impaction which are unresponsive to conservative treatment (Hartnack *et al.*, 2015). Rumentotomy gives direct access to the rumen, thereby allowing removal of indigested foreign bodies, sharp penetrating objects and foreign bodies lodged in the distal portion of the oesophagus (Ducharme, 1990; Ismael *et al.*, 2007; Patel *et al.*, 2012).

Uterine torsion *i.e*. the rotation of gravid uterus on its longitudinal axis, has been reported to be one of the major causes of dystocia (Rakuljic-zelov, 2002 and Singh *et al.*, 1992) and among the parturient bovines, it is associated with high rate of dam mortality (Matharu and Prabhakar, 2001). Among many other causes, uterine instability due to dorsolateral attachments of broad ligaments make the bovine population more susceptible to uterine torsion (Sloss and Dufty, 1980). Per-vaginal rotation of foetus, rolling of dam and caesarean section has been advocated for its treatment (Ghuman, 2010) (Fig. 1–3).

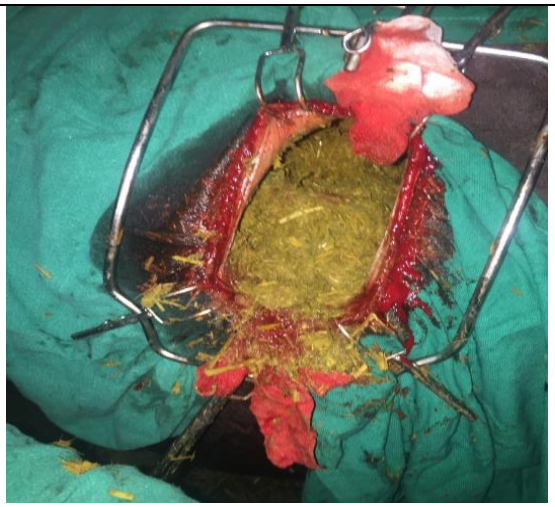

Fig.1 Rumenotomy in progress with weingarth set in position

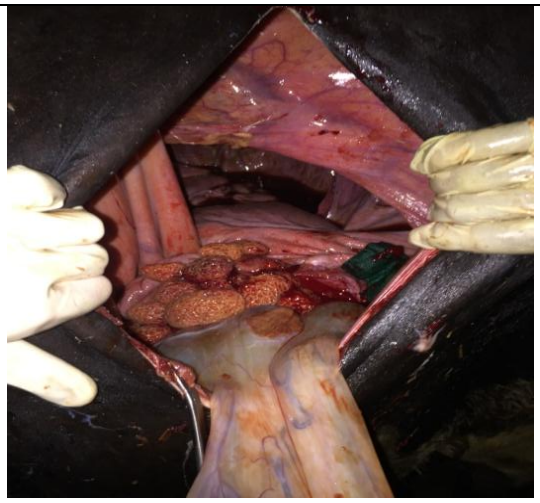

Fig.2 Removal of fetal membranes after uterine incision

Fig.3 Uterine suturing completed

In conclusion, we hereby state that the animal was suffering simultaneously with rumen impaction and uterine torsion. Performing rumenotomy followed by caesarean section was an appropriate method to relieve both the ailments with minimal stress to the animal.

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