VETERINARY TODAY

Case Study

Management of rectal prolapse in a goat

S. Soujanya

Department of Veterinary Pathology, College of Veterinary Science, Rajendranagar, Hyderabad-500030, Telangana state

Abstract

The present paper describes about the management of rectal prolapse in a goat with clinical signs of protrusion of rectum outside from the anus. The exposed part of rectum is bright red to pink colored, dry and cracked. The affected goat is irritated and showing severe straining. The animal was treated by washing of prolapsed mass with potassium permanganate solution, then reduced back into the pelvic cavity by applying a gentle pressure and retained by tying a purse string suture around the anus. The sutures were removed after 7 days and the goat was recovered.

Keywords: goat, rectal prolapse, purse string suture

Introduction

Rectal prolapse is a protrusion of one or more layers of rectum through the anus (Ettinger and Feldman, 1995). It can occur in all the domestic animals like sheep, goat, cattle, buffaloes, pigs, horses and carnivores. It may be complete or in complete depending on the involvement of all the layers of rectum or just the rectal mucosa (Anderson and Miesner, 2008). Prolapses are less common in goats than sheep. Many factors can contribute as a causative agent for rectal prolapse like sex, age, condition, diet, tail dock length, coughing, genetic susceptibility and dysuria. Rectal prolapse may result from prolonged tenesmus due to bloat, proctitis, diarrhoea, dystocia and constipation (Tyagi and Singh, 2010). The animals which prolapsed should not be used for breeding as they are more prone to vaginal prolapse during the parturition. The present paper communicates about the successful management of rectal prolapse in a goat.

History and observation

An adult goat aged about 3 years was presented to clinic with a history of anorexia, dullness, depression, restlessness and it had a strained delivery in the previous day evening that resulted in protrusion of a large mass of rectum through the anus. On clinical examination bright red to pink colored mass of rectum is hanging from the anus (Fig. 1). It was dry, cracked, showing severe edema and it was soiled. The goat was showing irritation and straining.

Figure 1: Rectal prolapse in a goat: bright red to pink colored mass of rectum is

Then exposed rectal tissue is washed with 2% potassium permanganate solution and ice packs were applied on the prolapsed tissue for 30 minutes to reduce the edematous swelling. Then prolapsed mass is lubricated with liquid paraffin, reduced manually into the pelvic cavity by applying a gentle pressure and it was retained in position by tying a purse string suture around the anus. A small opening was left while tying the purse string suture so that defecation is possible. Post operatively, the animal was administered with antibiotics like Intamox injection (Amoxycillin-Cloxacillin) @ 6 mg/ kg body weight intramuscularly and antispasmodic drugs like Dicyclomine hydrochloride @ 0.5 mg/ kg body weight intramuscularly for 5 days. Non-steroidal anti-inflammatory drugs like Meloxicam injection @ 0.25 mg/ kg body weight given intramuscularly for 3 days. The sutures were removed after one week. The goat had an uneventful recovery.

Treatment:

Caudal epidural block was given by using 2 ml of 2% Lignocaine hydrochloride to reduce the straining. Hair around the perineum was clipped. Then exposed rectal tissue is washed with 2% potassium permanganate solution and ice packs were applied on the prolapsed tissue for 30 minutes to reduce the edematous swelling. Then prolapsed mass is lubricated with liquid paraffin, reduced manually into the pelvic cavity by applying a gentle pressure and it was retained in position by tying a purse string suture around the anus. A small opening was left while tying the purse string suture so that defecation is possible. Post operatively, the animal was administered with antibiotics like Intamox injection (Amoxycillin-Cloxacillin) @ 6 mg/ kg body weight intramuscularly and antispasmodic drugs like Dicyclomine hydrochloride @ 0.5 mg/ kg body weight intramuscularly for 5 days. Non-steroidal anti-inflammatory drugs like Meloxicam injection @ 0.25 mg/ kg body weight given intramuscularly for 3 days. The sutures were removed after one week. The goat had an uneventful recovery.

Discussion

In present case the rectal prolapse was occurred in goat due to the strained delivery. In most of the mammals there is increased levels of estrogen and relaxin concentration occur few weeks before the parturition which might be contributed to the amplification of the pelvic muscle and ligament laxity that result in rectal prolapse (Jainudeen and Hafez, 2000). Increased intra-abdominal pressure brought about by rapidly expanding uterus may precipitate the rectal prolapse through the compromised anal sphincter (Biswadeep jena *et al.,* 2013).The common treatment for rectal prolapse is its repositioning and applying a purse

string suture (Borobia- Belsne, 2006; Jean and Anderson, 2006; Mahesh *et al.*, 2015 and Leeba *et al.*, 2015). In present case also rectal prolapse was successfully treated by its repositioning and by tying a purse string suture (Fig.2).

Figure 2: Rectum reduced back into the pelvic cavity and purse string suture tied around the anus.

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