RECTAL PROLAPSE IN CROSSBRED BUFFALO (*BUBALUS BUBALIS*) CALF

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ABSTRACT

A 2 years old male buffalo calf was presented with a history of prolapsed mass hanging from of anal region from last 2 weeks with signs of straining and difficulty to defecate. Another signs included inflammatory signs on rectal wall, soiling with dirt and congested mucous membrane. The animal was treated under posterior epidural anesthesia using lignocaine hydrochloride 2%. The prolapsed mass was manually replaced and purse string suture was applied. Broad spectrum antibiotics and analgesics were administered post-operatively. Animal recovered uneventfully 8th post treatment days.

Keywords: *Bubalus bubalis*, buffalo, rectal prolapse, crossbred, buffalo calf

INTRODUCTION

Many affections of digestive system found buffaloes due to indigestion and sometimes worm infestation. Prolapse of rectum one of them it involves eversion of the rectum beyond the level of the anus. Rectum prolapse involves rectal mucosa along rectal wall. It may be incomplete type where rectal mucosa is everted, or complete, in which all rectal layers are protruded. Sometimes, the rectum prolapse may associated with intussusceptions of the large intestine i.e. rectum, colon or even small intestine Slatter (2003). The prolapse of the rectum occurs not only in buffaloes also in other animals like pigs, ruminants, horses and carnivores (Anderson and Meisner, 2008). Symptoms and corrections depend on the degree of damage to the mucosal layers. Generally, manual reposition of anatomical position with support of external application of suture helps faster recovery of the prolapsed. If condition persists without any signs of recovery needs amputation of the prolapse is indicated or when perforating injuries or necrosis of the mucosal layers are present (Kersjes *et al.*, 1985). This paper presents a case of prolapse of rectum and its management in a male buffalo calf.

MATERIALS AND METHODS

History

A 2 years old male buffalo calf presented with the complaint of large protruded mass through the perineum region. As per owner anamnesis this condition was presented since 2 weeks and previously the condition was treated by local paravets with manual manipulation with application of various medicines. Treatment showed no significant changes and fruitful results. Owner was unsatisfied with the previous treatment

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and wanted permanent remedies. The owner came again for the treatment with lots of hope. Other history revealed anorexia. constipation, frequent straining and difficulty in defecation.

Clinical observations

The animal was examined to find out different sings for proper diagnosis of the condition. Clinical signs included dry, rough skin, pale mucous membrane along with large bulged mass protruded through anal opening (Figure 1).

Diagnosis

For the confirmation of the condition diagnosis was made by the help of owner history and clinical observations showed by animal. Differential diagnosis was also for made for comparison with similar findings like intussusceptions etc. Finally on the basis of all the observations the case was diagnosed as prolapsed of rectum. As the case was delayed presented, older and emergency need, decided to perform manual manipulation supported with surgical procedures.

RESULT AND DISCUSSIONS

Treatment was initiated with fluid therapy injection DNS (1000 ml, i/v) was given to improve the condition from dehydration. Animal secured properly and desensitization was achieved by posterior epidural anaesthesia using 15 ml of 2% lignocaine hydrochloride. The visible dirt materials of prolapsed mass were removed manually with gloved hand. The mass was washed with the help of 2% potassium permagnate solution

Figure 1. Showing the large protruded mass of rectum.Due to external exposures the mass was injured, tense, oedematous, swollen and contaminated with mud. Animal showed weak pulse, irregular respiration due to stress and depression. On manual manipulation by hand the protruded mass was repositioned in to their normal anatomical position but when the hand was removed the mass was again returned back in to as usual condition.

(1:1000 dilutions). The mass was repositioned in to the normal anatomical position manually after lubrication with liquid paraffin. To prevent the recurrence the additionally retention suture (purse string suture) were applied over the wall with cotton thread after impregnation of povidone iodine antiseptic solution (Figure 2).

Povidone iodine followed by Silver nitrate ointment was applied over the external wounds created during suturing. Post-operatively, antibiotic inection Ceftrixone 20 mg/kg, Antispasmotic agent Dicyclomine acetate, 10 ml and anti-inflammatory Meloxicam 0.2 mg/kg body weight intramuscularly were given on same and subsequently next four days. Cotton thread was removed after 8th days after complete healing. The animals showed uneventful recovery without signs of any complications and recurrence of the case.

Prolapse of rectum usually found in young animals due to with severe diarrhea and tenesmus. Any delay in treatments may lead to oedema, ischaemia, laceration, haemorrhages and shock, resulting in prognosis as poor to hopeless (Pande and Pande, 2002; Rubin, 2013). Long term condition creates intra abdominal pressure due to bloat, proctitis, diarrhorea, act of parturition and constipation (Tyagi and Singh, 2010). Similar finding was also observed on the present study. Sometimes it is genetically inherited trait is another factor that predisposes calves to develop rectal prolapse (David and Matt, 2008). Lignocaine hydrochloride 2% epidural was used by Singh and Jain (2013) as in the present case. The similar treatment was adopted for rectal prolapse reposition and application of a purse string suture as described by the Jean and Anderson (2006); Borobia-Belsne (2006); Madhu *et al*. (2014). Several techniques of prolapsed rectum amputation have been described and accepted like submucosal resection (Johnson, 1943), rectal ring method, stair step amputation (Fubini and Duchrame, 2004; Weaver *et al*., 2005), delorme's operation (Delorme, 1900) and popular trans abdominal procedures namely Ivalon® sponge (Morgan *et al*., 1972), Marlex

Figure 2. Purse string suture over the wall.

mesh (Keighley *et al*., 1983), Ripstein (Ripstein, 1972), perineal surgical repair (Nay and Blair, 1972), prophylactic colcopexy (Sherding, 1996) and extended abdominal rectopexy (Mann and Hoffman, 1988). It was concluded that this type of cases need early diagnosis and needful treatment because sometimes it may be life threatening.

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