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Short Communication

THERAPEUTIC MANAGEMENT OF COMPLETE RECTAL PROLAPSE IN A JERSEY CROSS BRED CALF – A CASE STUDY

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Rectal prolapse is a condition involving displacement of the rectum. A three month old male Jersey cross bred calf weighing 30.4 kg at PGRIAS, Kattupakkam was reported with a complaint of complete rectal prolapse and past history of half-feed, weakness and voiding foul smelling mucoid stool. This condition was corrected with applying the gentle manual pressure on prolapsed mass and therapeutic intervention following epidural nerve blocking, $KMnO_4$ disinfectant and ice applying. The calf showed uneventful recovery and improvement in feed consumption and weight.

Key words: Epidural nerve block, Manual digital pressure, Mucoid diarrhea, Rectal prolapse

Prolapse is defined as the slipping or falling down of a body part from its normal position. Rectal prolapse is a condition involving displacement of the rectum, which is the distal part of the colon just above the anus. The prolapse of the rectum can occur in all species of domestic animals viz. pigs, ruminants, horses and carnivores (Anderson and Meisner, 2008). Rectal prolapse is more common in young animals with the combination of tenesmus and severe diarrhea. Delay in treatments leads to edema, ischemia, laceration, haemorrhages and shock, resulting in prognosis as poor to hopeless (Rubin, 2013). The present clinical case reports the therapeutic management of complete rectal prolapse in a three month old Jersey male cross bred calf. The complete prolapse depicts protrusion of all the rectal layers from the anus.

A three month old male Jersey cross bred calf weighing 30.4 kg was observed with rectal prolapse (Fig. 1) at Cattle and Buffalo Breeding Unit, Post Graduate Research Institute in Animal Sciences (PGRIAS), Kattupakkam, Tamil Nadu. It had a past history of half-feed, weakness and voiding foul smelling mucoid stool for 2 days. On clinical examination, the calf exhibited severe tenesmus and voided blood mixed mucoid stool long with the protrusion of all rectal layers on the anal region. Other parameters noticed were sunken eye, pale coloured eye mucus membrane, weak pulses and increased respiratory rate. The case was diagnosed as complete rectal prolapse and planned for therapeutic intervention to relieve the calf.

The calf was properly restrained and administered epidural anaesthesia using 2%

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Fig. 1. Calf showing complete rectal prolapse

Fig. 2. Repositioned prolapse mass

lignocaine hydrochloride @1 mL at sacro-coccygeal space. The prolapsed rectal mass was washed with disinfectant ($KMnO_4$ 1:1000 solution) and ice was applied to reduce the size of the swollen mass. By applying gentle digital manual pressure on prolapsed mass, the rectum was repositioned on its anatomical location (Fig. 2). The calf was rehydrated with 0.9% NaCl@ 250 mL and 100 mL of Ringers lactate, intravenously. To counteract the infection in the intestine, it was treated with ceftriaxone and tazobactum (Intacef Tazo®4500 mg, Intas Pharmaceuticals Ltd) @5 mg/kg intravenously and 20% of amprolium soluble powder (Virbac private Ltd)@ 10 mg/kg orally for 3 days and 5 days, respectively. The supportive treatment provided was meloxicam injection (Trucox) @0.4 mg/kg intramuscularly and chlorpheniramine maleate @0.4 mg/kg intramuscularly for 3 days.

The calf was uneventfully recovered after 5 days of continual care and treatment. The feed consumption and body weight (32.6 kg at 15th days post-therapeutic) of the calf was also increased. Rubin (2013) also reported that the rectal prolapse commonly occurs in young animals associated with diarrhea. The prolonged tenesmus or intra-abdominal pressure due to diarrhea, bloat, constipation, proctitis and act of parturition leads to rectal prolapse (Tyagi and Singh, 2010). In the present case, mucoid diarrhea was reported in past and present history. Similar to this study, cases of rectal prolapse with or without involving surgical intervention and therapeutic management were reported by Tijjani *et al*. (2015), Khurma *et al.* (2016) and Gopalakrishnan *et al*. (2017).

Conflict of interest: The authors declare that there is no conflict of interest among them.

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