

## SUCCESSFUL SURGICAL MANAGEMENT OF COMPLETE RECTAL PROLAPSE IN A PIGLET

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Received: 22.05.2020; Accepted: 27.06.2020

## SUMMARY

A three months old piglet, maintained at a pig farm, presented to Veterinary Clinical Complex, LUVAS, Hisar with the history of rectal prolapse. The prolapsed mass was slightly swollen and necrotic. The pig was anaesthetized with Xylazine @ 2 mg/kg body weight and ketamine @10 mg/kg body weight administered intramuscularly and intravenously, respectively. The necrosed prolapse mass was excised after placing stay sutures close to the healthy part and then anastomosis was done. This piglet postoperatively administered with antibiotics and analgesics and showed uneventful recovery within a fortnight.

**Keywords:** Anastomosis, General anaesthesia, Piglet, Prolapse, Rectum

Rectal prolapse is the exteriorization or the protrusion of one or more layers of the rectum through the anus. It can be classified depending on the number of layers involved. When only rectal mucosa is everted called incomplete, while two or all the three layers of rectum are involved called complete (Anderson and Miesner, 2008). Predisposing factors may include parasitism, constipation, urethral obstruction and tail docking (Papatsiros *et al.*, 2012). In pigs, rectal prolapse occur when supporting tissues get weakened either due to straining pressure arising from diarrhoea, constipation and coughing (Smith *et al.*, 2006). Rectal prolapse is very common in porcine, occurring in 0.7-15% of young pigs between 6 and 16 weeks of age (Cech *et al.*, 2010). The diagnosis of rectal prolapse is simple and can be identified by exteriorized part of rectum. There are various methods for replacement of prolapsed mass and in acute prolapse, mass is repositioned and purse-string sutures are placed, whereas in chronic cases surgical correction is indicated.

A three months old piglet, weighing 10 kg, was presented by the owner to the teaching veterinary clinical complex, LUVAS, Hisar, with a prolapsed rectum since 4 days (Fig. 1). The piglet was alert. All the physiological and blood parameters were within normal physiological range. The prolapsed rectum was slightly swollen and necrotic. Rectal lumen was patent. Present case was planned for surgical correction and the pig was restrained in sternal recumbency. Soiled prolapsed rectal mass was washed with warm normal saline solution and area around rectum was prepared for aseptic surgery. The pig was anaesthetized with Xylazine @ 2mg/kg body weight and ketamine @10mg/kg body weight (John and Geoffrey, 2007) administered intramuscularly and intravenously, respectively. A viable portion of rectum was exteriorized through the perineum and two 22G straight needles were inserted into

healthy part of rectum adjacent to necrotic portion at right angle to each other. The necrosed part of rectum was excised (Fig. 2) and end to end anastomosis of the both serosal and mucosal layers was done using Vicryl no 3-0 (Fig. 3). Post operatively antibiotic (Enrofloxacin @7.5 mg/kg) and analgesic (Flunixin meglumine@ 2.2 mg/kg) along with laxatives prescribed to avoid straining that may lead to wound dehiscence at rectal suture line. Piglet showed uneventful recovery within 15 days. There were no complications following the surgery.

The etiology of the present case might be constipation arising from the ingestion of indigestible food material and less water intake. In chronic cases, a plastic tube is inserted into the rectum and rectum is sutured around the tube (Douglas, 1985) but it often led to lumen constriction as well as tenesmus due to presence of the foreign body in rectum. The chances of reoccurrence are high. In the present case, no such tube was used. The outcome of the surgery was successful and no reoccurrence was reported.

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Fig. 1. Pre operative image of devitalized prolapsed rectal mass.



Fig. 3. Immediate post operative image



Fig. 2. End to end showing resection and end to end anastomosis of rectum