

# INCISIONAL COLOPEXY FOR RECURRENT RECTAL PROLAPSE IN A DOG

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This report presents a case of successful treatment of rectal prolapse by incisional colopexy in a four-month-old male dog.

**Keywords:** Bulldog, Colopexy, Rectal prolapsed.

A full-thickness intussusceptions of the rectal wall that protrudes externally through the anus is the hallmark of rectal prolapse. Young, unthrifty dogs with chronic diarrhoea associated with endo-parasitic infection have the highest prevalence (Amarpal *et al.*, 2010). Rectal prolapse can occur to animals of any age or sex, though young animals are more likely to experience it (Sophie *et al.*, 2018). Rectal prolapse may also be characterised by a variety of concomitant anatomic anomalies, including loss or attenuation of the rectal sacral attachments, diastasis of the levator ani, an unusually deep cul-de-sac, redundant sigmoid colon, patulous anal sphincter (Rautio *et al.*, 2016). Colopexy is considered as first line of treatment in recurrent rectal prolapse and is mostly performed as choice of treatment for chronic rectal prolapse and perineal hernia condition (Daniel D. Smeak, 2020). Colopexy aims to prevent rectal prolapse by forming permanent adhesion of the descending colon to the left abdominal wall (Magden *et al.*, 2015). A case of recurrent rectal prolapse treated by colopexy is presented in this report.

## Materials and Methods

A four month old male Dog was presented to Referral Veterinary Polyclinic, ICAR-Indian Veterinary Research Institute, Izatnagar with the history of tenesmus, chronic diarrhoea with sporadic bleeding for a

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week, with the complaint of occurrence of repeated intermittent rectal prolapsed Fig.1. The physical examination of animal revealed protrusion of anorectal mucosa and second degree of rectal prolapse which was around 6 cm in diameter. The faecal examination revealed Ancylostomiasis.



**Fig.1. Prolapse of Rectum**

Haematological examination revealed mild normocytic, hypochromic regenerative anaemia, with a haemoglobin (8.4 g/dl), platelets ( $298 \times 10^3$ ), red blood cell ( $4.32 \text{ million/mm}^3$ ), PCV (24%), TLC ( $12.6 \times 10^3$ ), neutrophils 58%, lymphocytes 40%, monocytes 6%, eosinophils 3%, basophils 2% and serum biochemical examination revealed creatinine (0.8mg/dl) and ALT (25.0 U/L).

## Surgical treatment and Results

Along with cold pack application and manual reduction was achieved under epidural anaesthesia. Purse string suture was placed around the anus. However, the

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prolapse recurred after 6 days of manual reduction. The dog was treated with an antibiotic Ofloxacin with ornidazole PO for 5 days, anti-inflammatory meloxicam at 0.2mg/kg PO, antiparasitic combination of pyrantel (5 mg/kg b.wt.), febantel (10mg/kg b.wt.) and praziquantel (5 mg/kg b.wt.) one tablet orally and advised to repeat after 3 months along with anti-spasmodic dicyclomine hydrochloride 0.2 mg/kg I/M with fluid therapy by Ringers Lactate I/Vroute. Repeated faecal examinations were consistently negative for parasites.

Since manual reduction was not successful, Surgical colopexy was considered. The dog was pre-medicated using midazolam at 0.2 mg/kg I/M and medetomidine at 0.026mg/kg I/M and anaesthesia was induced with ketamine at 5 mg/kg I/M and maintained with 0.75% to 3% isoflurane delivered in oxygen at flow rate of 1.5 L/min through a 6 mm endotracheal tube. Celiotomy was performed, the descending colon was located and retracted gently towards cranial side, the serosa of the antimesenteric side of the descending colon was scarified and left abdominal wall was incised using a BP blade, The colopexy was achieved by suturing descending colon to the left abdominal wall using 3-0 polyglactin sutures (PGA) in a simple continuous suture pattern. Later omentalization of sutured site ("pexy site") was done. Care was taken not to penetrate the colonic lumen and sutures were placed at least 3 mm bites of submucosa when approximating the colonic wall to the abdominal incision. The abdomen was flushed with sterile metronidazole and saline water, and the muscular, subcutaneous and skin were sutured separately as per the standard procedures (Fig.2.).

The present case was postoperatively managed with oral medications which includes ceftriaxone at 20 mg/kg body weight, meloxicam at 0.2mg/kg body weight, laxative cremaffin suspension 3 ml B.I.D. and multivitamin suspension 5 ml B.I.D with feed restriction and regular follow up was done up to a month, during which animal neither

showed recurrence of rectal prolapse nor post-operative complications were observed after 15 days postoperatively. Appetite and stool production was normal, and an uneventful recovery was recorded after 3 months of follow-up.



**Fig.2. Exteriorised descending colon.**

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