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M Vigneswari
Assistant Professor, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

S Tina Roshini
Assistant Professor, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

N Gurunathan
Assistant Professor, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

Vedhavani
PG Scholar, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

A Manas
PG Scholar, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

Manju
PG Scholar, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

Angunuo Mere
UG Scholar, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

Chimithi
PG Scholar, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

Arivukarasi
PG Scholar, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

Corresponding Author:
M Vigneswari
Assistant Professor, Department of Veterinary Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry, India

Surgical management of recurrent rectal prolapse in a pup by colopexy

M Vigneswari, S Tina Roshini, N Gurunathan, Vedhavani, A Manas, Manju, Angunuo Mere, Chimithi and Arivukarasi

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Abstract
A 48 days old female Rajapalayam puppy was presented to the Small Animal Unit of the Veterinary Surgery and Radiology Department, VCC, RIVER, Puducherry with a history of straining while voiding. Physical examination revealed protrusion of anorectal mucosa and the degree of prolapse was around 5 cm in diameter. By ultrasonography, rectal prolapse was differentiated from ileocolic intussusception. After manual reduction of rectal prolapse, purse string suture was applied around the anus and additional epidural anaesthesia was achieved to prevent re-prolapse. Colopexy was performed after repeated rectal prolapse in spite of manual reduction. Rectal straining was not noticed; hence non incisional technique was effective in preventing recurrent rectal prolapse.

Keywords: Colopexy, purse string suture, recurrent rectal prolapse

Introduction
Rectal prolapse is protrusion of a portion of the rectum or rectal mucosa through the anus, usually caused by an underlying disorder that cause diarrhoea and tenesmus, constipation and dyschezia (Landon *et al*., 2007) [1]. Rectal prolapse commonly occurs in young, parasitized dogs and unresponsive to manual reduction and placement of purse string suture require colopexy (Giley *et al*., 2003) [4]. The present case describes about recurrent rectal prolapse in which simple purse suture technique was failed to correct while nonincisional technique was found to be effective.

Case history and Observation
A 48 days old female Rajapalayam puppy was presented to the Small Animal Unit of the Veterinary Surgery and Radiology Department, VCC, RIVER, Puducherry with a history of straining while voiding. Physical examination revealed protrusion of anorectal mucosa and the degree of prolapse was around 5 cm in diameter (Fig 1). By ultrasonography, rectal prolapse was differentiated from intussusception. On faecal examination, endo- parasitism was confirmed. After deworming and manual reduction of rectal prolapse, purse string suture was applied around the anus and additional epidural anaesthesia was achieved to prevent re-prolapse. The prolapse would recur frequently after manual reduction. Based on reoccurrence, nonincisional technique was adapted.

Treatment
General anesthesia was achieved by Inj. Diazepam @ 0.5 mg/kg and Inj. Propofol @ 3 mg/kg intravenously and maintenance of anaesthesia was carried out with isoflurane inhalation anaesthesia. A ventral midline celiotomy was performed. Exploration of the abdomen to locate the descending colon and the colon was pulled cranially to reduce the prolapse. Verification of the reduced prolapse was performed by rectal examination. Antimesentric border of the descending colon was then sutured to the abdominal wall approximately half the distance between the line a alba and the sublumbar muscles by use of four longitudinal rows of simple interrupted suture pattern using size 2-0 polyglactin 910 (Fig 2).

Sutures were placed including the submucosa in order to avoid entering into the lumen of the colon. The surgical site was lavaged and surrounded it with omentum before closing the abdomen. Postoperatively, liquid diet was advised for five days with oral cefotaxime @ 20 mg/kg b. wt and meloxicam @ 0.2mg/kg b.wt for five and three days respectively. Rectal straining was assessed for reoccurrence and skin sutures were removed on 10th postoperative day.

Results and Discussion

After manual reduction of rectal prolapse recurrence was reported several times irrespective of purse string suture, which may be attributable to the endoparasitism. However, deworming was performed and no recurrence was reported but one week later rectal prolapse was noticed and colopexy was performed and no recurrence was noticed and animal showed complete recovery (Amarpal *et al*., 2010) [2]. Colopexy is the preferred technique for recurrent rectal prolapse that fail to response to multiple attempts at purse string suture. Intestinal functions are not adversely affected by this technique. Following colopexy permanent fibrous adhesions occur and reduction of the prolapsed mass is maintained. Although both simple suturing and incisional colopexy are reported to be effective (Simon *et al*., 2009) [3] but former method employed in the present case showed successful in preventing recurrent rectal prolapse.

Fig 1: Protrusion of anorectal mucosa

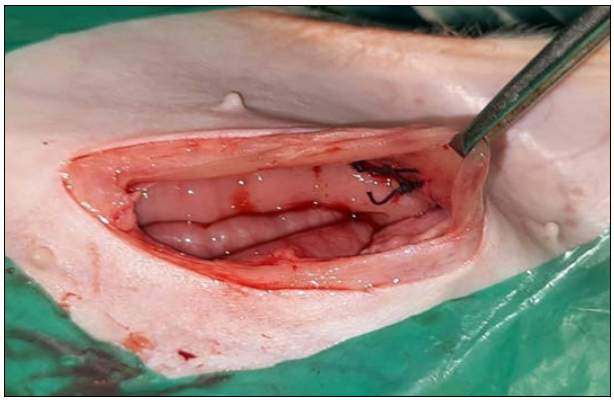

Fig 2: Antimesentric border of the descending colon was then sutured to the abdominal wall

Reference

1. Landon BP, Abraham LA, Charles JA, Edwards GA. Recurrent rectal prolapse caused by colonic duplication in a dog. Aus Vet J. 2007;85(9):381-385.
2. Amarpal SJ, Saxena AC, Kinjavdekar P, Madhu DN. Colopexy for the treatment of recurrent complete rectal prolapse in a male pug dog. Intas Polivet. 2010;11(2):355-357.
3. Simon MS, Shafiuzama M, Sooryadas S, Arun Prasad A, Suresh Kumar R. Management of recurrent rectal prolapse in a pup by colopexy. Tamil Nadu J Vet. Anim. Sci. 2009;5(6):275-277.
4. Gilley RS, Caywood DD, Lulich JP, Bowersox TS. Treatment with a combined cystopexy-colopexy for dysuria and rectal prolapse after bilateral perineal herniorrhapgy in a dog. J Am. Vet. Med. Assoc. 2003;222(12):1717-1721.