Clinical Article

SURGICAL MANAGEMENT OF RECURRENT RECTAL PROLAPSE IN A PUG PUP
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Abstract: A 3 month old male Pug pup was brought to the Department of Veterinary Surgery and Radiology with history of straining and protruded anus from last 2 days. The pup had history of severe diarrhoea from the last 5 days. Clinical examination revealed a red colored rosette like mass protruding through the anal orifice. A probe was passed between rectal wall and prolapsed mass for differential diagnosis from intestinal intussusception. On the basis of this differential diagnosis along with history and clinical findings, it was diagnosed to be a case of rectal prolapse and it was decided to correct the prolapse surgically. The prolapsed mass was cleaned with Normal saline and betadine solution and Lignocaine jelly was applied. Following amputation of the mass, the suture line and the anal area was lubricated with antibiotic ointment. Post-operatively, Inj. Ampiclox (250 mg I/M for 3 days), Inj. Melonex and Inj. Conciplex (0.5 ml I/M for 3 days) were administered. The wound was dressed daily with silver sulphadiazine ointment for 7 days. The animal was given liquid diet for another seven days and then gradually shifted to its normal diet. The animal recovered completely and uneventfully in a time period of 10 days.

Keywords: pup, purse string suture, rectal prolapsed.

Introduction
Rectal prolapse is the protrusion of the rectal mucosa through the anal opening. It is principally associated with endoparasitism or enteritis in young animals (Fossum, 2002). Rectal prolapse in dogs is a consequence of disorders such as diarrhoea, tenesmus, lower urinary tract and prostatic diseases that produce persistent straining (Sherding, 1996). Clinically, it appears as a pink to red elongated cylindrical or rosette like mass (Slatter, 1993). Prolapse of rectum is commonly prevalent in very young and very old animals due to loosening of sphincter ani and rectal mucous membrane (Venugopalan, 2000). The present case deals with successful surgical management of rectal prolapse in a Pug pup.

Case history and Clinical Observation:-
A 3 month old male Pug pup was brought to Department of Veterinary Surgery and Radiology with the history of hanging of tubular pink mass protruding from anus after 5 days of severe diarrhoea. The prolapse mass was reduced manually earlier ones by local practicing
veterinarian. No history of previous deworming and pups always exhibited symptoms of straining and licking of prolapsed mass. On clinical examination, a red colored rosette like mass was visible protruding through the anal opening (Fig.1). A probe was passed between the prolapsed mass and rectal wall for differential diagnosis from prolapse of intussusceptum mass which confirmed it to be rectal prolapse as the probe could not be inserted. On physical examination the prolapsed rectal mass did not show any necrosis or ulceration. Physiological parameters were within the normal range. Pain evinced on palpation of abdomen. On the basis of this differential diagnosis along with history and clinical findings, it was diagnosed to be a case of rectal prolapse and it was decided to correct the prolapse surgically with manual reduction and placement of purse-string sutures around the anus.

**Treatment and Discussion:**
The animal was given intravenous fluid therapy in the form of Dextrose saline solution (150 ml) and the prolapsed rectal mass was washed with warm normal saline and betadine solution. Lignocaine jelly and ice cubes were applied on the prolapsed mass for reducing the swelling. The rectum was extended posteriorly and a series of 4-5 interrupted mattress sutures using chromic catgut size No. 0 with full curvedatraumatic needle were inserted around the circumference of the bowel. Then the prolapsed portion of the bowel was removed with an incision the rough the tissues about 1 cm posterior to the suture. The rectal mucosa, muscularis and serosal layers were sutured with series of interrupted sutures. The remainder of the bowel retracted pulling the suture anteririor to the sphincter. The bleeding vessels were carefully ligated. The suture line and anal area was lubricated with antibiotic ointment. After amputation of prolapse the animal was treated with 250 ml of inj. DNS I/V, Inj. Ampiclox (250 mg I/M for 3 days), Inj. Melonex and Inj. Concplex (0.5 ml I/M for 3 days) were administered. The wound was dressed daily with silver sulphadiazine ointment for 7 days. The animal was given liquid diet for another seven days and then gradually shifted to its normal diet. The animal recovered completely and uneventfully in a time period of 10 days. There was no recurrence of prolapsed mass even after one week. Deworming of pup was done with Easypet tablet. Rectal prolapse occur due to severe straining during constipation and chronic diarrhoea (Venugopalan, 2000) and inflammatory conditions of the rectum and colon. Proplased rectal mass was due to severe endoparasitism which induced chronic diarrhoea (Slatter, 2003). The cause of rectal prolapse has been reported to be due to malnutrition, debility, constant straining, irritation of rectum, intestinal obstruction, prolonged tenesmus, unthriftness and endoparasites in dogs and cats (Slatter, 1993).
Repeated rectal eversion causes atony of sphincter ani, loosening of rectal mucosa, loosening of the attachment of peri-rectal tissue and leads to rectal prolapse (Venugopalan, 2000). These findings also simulate with the findings of Amarpal et al. (2010) in pups which were successfully treated by surgery. Thus, it is concluded that treatment of fresh rectal prolapsed manually along with anal purse string suture is one of the effective methods for successful treatment of rectal prolapsed in canines.

References

Figure 1. Showing red colored rosette like mass protruding through the anal opening
Figure 2. Showing surgical correction of prolapsed mass