Surgical Correction of Rectal Prolapse in a Golden Hamster (*Mesocricetus auratus*)

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ABSTRACT

A one-year-old hamster was brought to the hospital with a history of a visceral mass hanging from its anal opening. On physical examination, an intestinal loop measuring 1.2 cm was prolapsed from the anal opening and the mass was stained with dried faecal material. Clinical examination confirmed the case as rectal prolapse, and surgery was performed. Under gaseous anaesthesia, midventral celiotomy was performed, and rectal prolapse was corrected by abdominal approach. Postoperatively, the animal was maintained with antibiotics and wound management. Suture was removed on the 7th post-operative day, and the animal recovered.

Keywords: Hamster, Rectal prolapse, Celiotomy

INTRODUCTION

Rectal prolapse usually occurs in small rodents, as a sequel to wet-tail or proliferative ileitis (bacterial infection with inflammation of the small intestine) in hamsters and other small rodents, but can also occur due to intestinal parasites and other etiologies, which cause diarrhoea (Joseph and Winsey, 1987).

CASE HISTORY AND OBSERVATION

A one-year-old hamster was brought to the hospital with a history of a visceral mass hanging from its anal opening. The owner reported diarrhea for the past week, initially having some reddish bulge on the anal region, which became bigger later.

Physical examination revealed an intestinal loop measuring 1.2 cm that was prolapsed from the anal opening, and the mass was stained with dried faecal material (Fig. 1). The animal was active and alert, with normal feeding habits and vital parameters. Clinical examination confirmed the case as a rectal prolapse, and surgery was scheduled to correct the condition.

TREATMENT AND DISCUSSION

The animal was induced by mask induction with 3% Isoflurane in Oxygen and maintained with 1 to 1.5% Isoflurane in Oxygen. The prolapsed mass was lavaged with normal saline (0.9% saline solution) and protected with a saline-soaked gauze piece. The surgical site was aseptically prepared by shaving and scrubbing with 5% povidone iodine and surgical spirit (95% isopropanol). A midventral celiotomy was performed (Fig. 2), the large intestine was identified, and rectal prolapse was corrected by abdominal approach by milking the prolapsed rectum back into its position. Colopexy was performed by suturing the colon to the abdominal wall after mild scarification, with synthetic monofilament absorbable suture material size 6-0 polydioxanone. Abdomen was closed as muscle, subcutaneous and skin by continuous suturing pattern with 4-0 polyglycolic acid PGA (Fig. 3). Postoperatively, the animal was maintained with antibiotic Doxycycline 5mg/kg PO twice daily for 5 days, and wound management was done with povidone iodine ointment. Suture was removed on the 7th postoperative day, and the animal recovered (Fig. 4).

In rectal prolapse, if the prolapsed mass is very small and replaceable, then it is usually corrected by reposition and retention with the help of a purse-string suture in the anal ring. If the mass is not small enough to reposition or necrosed, then it has to be surgically corrected (Tyagia *et al*., 2015). The vitality of the prolapsed mass plays a major

role in determining the surgical procedure needed for the condition; resection and anastomosis are indicated only if the mass exhibits necrotic changes (Pollock, 1975). In this case, the prolapsed mass was irreducible by normal reposition, and the mass was viable without necrotic changes. Hence, the midventral celiotomy and colopexy were used to correct the condition.

SUMMARY:

A case of rectal prolapse in a Golden Hamster (*Mesocricetus auratus*) was successfully corrected by midventral celiotomy with colopexy.

REFERENCES

Joseph, S. M. and M.A. Winsey (1987), Rectal prolapse in hamsters, *Vet. Rec.,* **120**(1): 375-376.

Pollock, W. B. (1975), Prolapse of invaginated colon through the anus in golden hamsters (*Mesocricetus auratus*), *Lab. Anim. Sci.,* **25**(3): 334-336.

Tyagia, S. K. (2015), Management of Rectal Prolapse in a Hamster- A Case Report, *Vet. Clin. Sci.*, **3**(4): 22-23.

Fig. 1: Pre-operative picture showing prolapsed rectum

Fig. 2: Intra-operative picture showing midventral celiotomy incision in a hamster

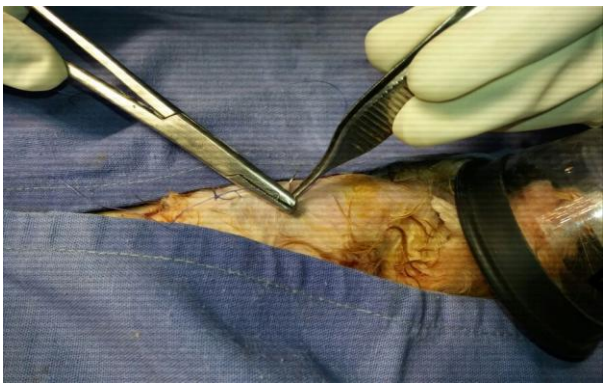

Fig. 3: Intra-operative picture of suturing of the abdominal wall after correction of rectal prolapse

Fig. 4: Post-operative picture showing complete healing of the surgical site