

SURGICAL MANAGEMENT OF CHRONIC PERINEAL HERNIA IN A POMERANIAN DOG – A CASE REPORT

**K. Sai Gunaranjan¹, G. Kamalakar^{1*}, Thara Singh D. Lamani¹, L. Suresh²
and B.N. Nagaraja³**

¹Ph. D. Scholar, ²Associate Professor, ³Professor & Head
Department of Veterinary Surgery and Radiology, Veterinary College, Hebbal, KVAFSU,
Bangalore – 560024, Karnataka

E-mail: drkamal1vet@gmail.com (*Corresponding author)

Abstract: An adult Pomeranian dog was presented to the clinic with signs of dyschezia, obstipation, constipation and change in tail carriage. Clinically it was dull, dehydrated and on palpation revealed presence of a soft reducible mass on the right perineal region. The condition was diagnosed as unilateral perineal hernia. Perineal herniorrhaphy was performed under general anaesthesia to correct the condition. Hernial content was found to be omentum. With good post operative care and management the pet recovered well without any complications.

Keywords: Pomeranian dog, Perineal hernia, Omentum, Herniorrhaphy.

INTRODUCTION

Perineal hernia refers to the herniation of pelvic and occasionally the abdominal viscera into the subcutaneous perineal region due to failure of the muscular pelvic diaphragm support the rectal wall. Congenital predisposition, hormonal imbalance, structural weakness of the pelvic diaphragm, prostatic disease and chronic constipation are the proposed causes of weakness of the pelvic diaphragm. The condition occurs commonly in middle aged or aging intact male dogs and rarely in females (Pratummintra et al, 2013). Approximately 59% of the perineal hernias are unilateral while 41% are bilateral (Bongartz et al, 2005). Diagnosis of perineal hernia is based on history, clinical signs like constipation, obstipation, dyschezia, tenesmus, rectal prolapse, stranguria, or anuria and radiography and ultrasonography. Surgical treatment involves repositioning of the muscles of pelvic diaphragm using non absorbable suture materials (Bellenger and Canfield, 2003). Present paper reports successful surgical management of chronic perineal hernia in a Pomeranian dog.

CASE HISTORY AND OBSERVATIONS

A twelve years old male Pomeranian dog weighing about 15 kg was presented to the Dept. of Veterinary Surgery & Radiology, Veterinary College, Hebbal, Bengaluru with signs of dyschezia, obstipation, constipation, anorexia since 5 days. History also revealed presence of a

mass on the right perineal region since two months and because of which animal is keeping the tail to a side. The clinical examination revealed that the mass was soft and reducible along with a palpable ring, confirming it as a case of unilateral perineal hernia. All physiological parameters like temperature, respiration and pulse were in normal range. Haematology revealed leucocytosis with neutrophilia (TLC - 21.5×10^3). Based on history, clinical and physical examination it was confirmed as perineal hernia and herniorrhaphy was performed.

TREATMENT AND DISCUSSION

Pre operatively dog was rehydrated using 500 ml RL and animal was prepared for aseptic surgery under general anaesthesia. The animal was kept on fasting for 12 hours prior to surgery. Atropine sulphate @ 0.04 mg/kg body weight was given sub cutaneously and Xylazine @ 1 mg/kg body weight was given intramuscularly as preanesthetic medication. Thiopentone @ 12.5 mg/ kg body weight I/V was used as induction and maintenance anaesthesia. The dog was positioned in ventral recumbency with tail pulled over the back. The pelvis was elevated by the positioning bags and limbs padded against the table. Prepared site was draped. A 7-9 cm long dorsoventral skin incision was made over the herniated mass. The subcutaneous and supportive tissues were separated by blunt dissection. Hernial sac was identified secured and separated from the subcutis as there were lot of adhesions. The hernial sac devoid of any contents was then incised and removed. The hernial ring was identified and sutured by simple interrupted pattern with cat gut No.1 suture material. The sub cutaneous tissue and skin were sutured separately with vicryl No.0 and trulon No.1 suture material respectively. Postoperatively the surgical site was dressed with povidone iodine ointment and medication was given with Inj. Ceftriaxone -250 mg subcutaneously and Inj. meloxicam 0.5 ml intramuscularly. Oral antibiotics were continued for 5 days.

The incidence of perineal hernia in intact male dogs increases with age (Burrows et al., 1973) as observed in this case. Surgical reconstruction of the pelvic diaphragm is commonly recommended for the correction of Perineal hernia. Several surgeries have been suggested, including a simple appositional technique, vascularized muscle flap transposition (internal obturator muscle, superficial gluteal muscle, semitendinosus muscle), and the use of implants or grafts techniques (synthetic mesh, porcine small intestinal submucosa, canine small intestinal submucosa, autologous tunica vaginalis) Morello *et al.* (2015) Lee *et al.* (2012). In the present case perineal herniorraphy technique was used to correct the perineal hernia as described by Hosgood *et al* (1995). Complications after Perineal hernia repair are common and may include recurrence of perineal hernia, surgical wound dehiscence and infection, tenes-

mus, fecal incontinence, and rectal prolapse. Matthiesen *et al.* (1989) complications were avoided by proper medical and dietary management of the dog post operatively. In the present case no post operative recurrence was observed and the animal recovered uneventfully.

References

- [1] Pratummintra, K., Chuthatep, S., Banlunara, W and Kalpravidh, M. (2013). Perineal Hernia repair using an Autologous Tunica Vaginalis Communis in Nine Intact Male Dogs. *J. Vet. Med. Sci.* 75(3): 337–341.
- [2] Bongartz A, Carofiglio F, Balligand M, Heimann M and Hamaide A. (2005). Use of autogenous fascia lata graft for perineal herniorrhaphy in dogs. *Vet. Surg.* 34: 405–413.
- [3] Bellenger CR, Canfield RB (2003): Perineal hernia. Cited in Slatter D (Editor) *Textbook of Small Animal Surgery*, 3rd edn. Saunders, Philadelphia. Pp: 498.
- [4] Burrows CF, Harvey CE. (1973): Perineal hernia in the dog. *J. Small Anim. Pract.* 14: 315-332.
- [5] Hosgood G, Hedlund CS, Pechman RD and Dean PW. (1995). Perineal herniorrhaphy: perioperative data from 100 dogs. *J. Am. Anim. Hosp. Assoc.* 31: 331-342.5.
- [6] Morello E, Martano M, Zabarino S, Nicoli S, Bussadori R, Buracco P. Modi. (2015). Semitendinosus muscle transposition to repair ventral perineal hernia in 14 dogs. *J. Small. Anim. Pract.* 56: 370-376.
- [7] Lee AJ, Chung WH, Kim DH, Lee KP, Suh HJ, Do SH, Eom KD and Kim HY. (2012). Use of canine small intestinal submucosal allograft for treating perineal hernia in two dogs. *J. Vet. Sci.* 13: 327- 330.
- [8] Matthiesen DT. (1989). Diagnosis and management of complications occurring perineal herniorrhaphy in dogs. *Compend. Contin. Educ. Pract. Vet.* 11: 797-802.

Fig 1: Photograph showing swelling at right perineal region



Fig 2: Photograph showing hernial contents



Fig 3: Photograph showing hernial ring



Fig 4: Photograph showing herniorrhaphy.



Fig 5: Photograph showing cutaneous sutures

