

Surgical Management of Inguinal Hernia in Labrador Retriever with both Testes in the Hernial Sac

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Introduction

Inguinal hernias are protrusion of organs or tissues through the inguinal canal. Unilateral inguinal hernias are more common than bilateral hernias (Fossum *et al.*, 2013). Inguinal hernias may arise from the congenital abnormality of the inguinal ring or may be caused by trauma. Inguinal hernia is commonly seen in old intact bitches (Simon and Kannan, 2011). Age, breed, gender, anatomical, hormonal and metabolic status are the factors involved in development of inguinal hernia (Sainulabdeen *et al.*, 2016). The common contents in the hernial sac include uterus, omentum, fat, urinary bladder and ovary (Kalitha *et al.*, 2012). Omentum is the most common organ present in the canine inguinal hernia. In the present paper a rare case of inguinal hernia in a male dog and its successful surgical management is reported.

Keywords: Hernial contents, Inguinal hernia, Inguinal ring, Herniorrhaphy, Labrador Retriever.

Case History and Observations

A male Labrador Retriever dog of 8 years old weighing about 28 kg was presented with complaint of swelling in the left side of penis increasing from three months. On clinical examination unilateral swelling was found extending from left inguinal region to the penis. Physical examination revealed no pain on palpation however, the contents of swelling were reducible. Appetite, respiration, and rectal temperature were within normal range. Based on history and clinical examination case was diagnosed as inguinal hernia.

Surgical treatment

The caudal abdominal and inguinal area were prepared aseptically. Dog was premedicated with inj. Atropine @ 0.04 mg/kg b.wt SC and inj. Xylazine @1mg/kg b.wt IM. Induction was done with Ketamine hydrochloride @5mg/kg b.wt and intubated. Maintenance was done with inj. Ketamine hydrochloride and inj. Dizepam (1:1).

The dog received an IV constant rate infusion of an isotonic balanced electrolyte solution @15 mL/kg throughout the surgery. The dog was positioned in dorsal recumbency (Fig.1). Linear incision was made over the swelling and hernial sac was explored, hernial sac contained omentum and testicles (Fig.2 & 3). Excess omental fat was trimmed off and orchiectomy was done (Fig.4) Contents were reduced back to abdominal cavity and hernial ring was closed by Polygalactin 910 No.1 by simple interrupted pattern. Subcutaneous tissue was sutured in simple interrupted pattern using Polygalactin 910 No.0 to obliterate the dead space. Skin was closed by Polyamide No.0 in cross mattress pattern (Fig.5). Post operatively animal was administered with Ceftriaxone Sodium (Intacef, Intas pharmaceuticals Ltd., Ahmedabad) @ 20mg/kg b.wt IV for period of 5 days. Meloxicam @ 0.3 mg/kg b.wt was administered once daily for three days IM. Skin sutures were removed on 10th post operative day.



Figure.1



Figure.2



Figure.3

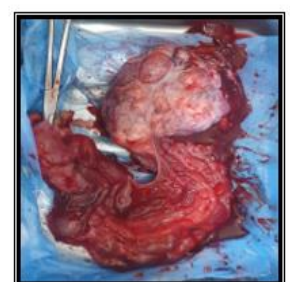


Figure.4



Figure.5

Results and Discussion

Inguinal hernia has been classified as congenital and acquired (Simmon and Kannan, 2011). The dog in this report was 8 years old, and the history of hyperactivity like jumping and barking suggests the acquired cause of hernia. Herniorrhaphy by simple interrupted or mattress sutures has been reported as effective surgical treatment for inguinal hernia (Jahromi *et al.*, 2009). In the present case hernial ring was closed by simple interrupted suture pattern. Inguinal hernias are reportedly rare in male dogs. Congenital inguinal hernias in dogs are more common in males than females (Waters *et al.*, 1993). Omentum is reportedly the most common content present in canine inguinal hernia (Bojrab *et al.*, 1998). The omentum was also the main content of the sac in this case too. Small intestine viability is an important factor in determining whether herniorrhaphy is an elective or an emergency procedure. Complications in the dog treated surgically for inguinal hernia are incisional infection, wound dehiscence, hematoma, seroma, excessive post-operative swelling, hernia recurrence, sepsis or peritonitis and death. The reported case did not show any form of complications having been monitored for more than four months.

References

- Bojrab, M.J., Ellison, G.W. and Solum, B. (1998). Current Techniques in Small Animal Surgery 4th Edn., Williams and Wilkins, pp 552-554.
- Fossum, T.W., Dewey, C.W., Horn, C.V., Johnson, A.L., Macphail, C.M., Radlinsky, M.G., Schulz, K.S. and Willard, M.D. (2013). Small Animal Surgery. 4th Edn., Elsevier, pp. 401.
- Jahromi, A.R., Nazhvani, S.D., Gandmani, M.J. and Mehrshad, S. (2009). Concurrent bilateral inguinal and umbilical hernias in a bitch - a

- Kalitha, D., Choudhary M. and Sailo M. (2012). Inguinal hysterocoele and epiplocoele in a bitch. *Intas Polivet*, 13: 113-114.
- Ravikumar, S. and Ranganath, L. (2014). Surgical management of inguinal hernia in the male dog. *Indian Journal of Canine Practice*, 6: 53-55.
- Sainulabeen, A., Nair, S., Satheesan, K. and Devanand C.B. (2016). Inguinal Hysterocele and its surgical management in a female dachshund dog. *Malaysian Journal of Veterinary Research*, 7: 31-34.
- Simon, M.S., and Kannan, T.A. (2011). Inguinal hysterocoele and its surgical management in a bitch. *Indian Journal of Field Veterinarians*, 7: 69-70.
- Waters, D.J., Roy, R.G. and Stone, E.A. (1993). A retrospective study of inguinal hernia in 35 dogs. *Veterinary Surgery*, 22(1): 44-49.