# INGUINAL HYSTEROCELE AND ITS SURGICAL MANAGEMENT IN A BITCH

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Inguinal hernias are relatively common in dogs and most often involve old intact bitches (Parkes, 1981). It may be direct or indirect hernia in females and direct hernia in males. Most important cause of inguinal hernia in domestic animals is enlargement of the entrance of the vaginal process, which remains open (Hayes, 1974). Bitch may be predisposed as the inguinal canal is shorter and larger in diameter than in males (Elkins, 1983). Most inguinal hernias appear during estrus or in pregnant bitches (Water, 1993). Unilateral Inguinal hernia occur more on left side than on right side (Dorn, 1981). Contents of the inguinal hernia may include omentum, fat, ovary, uterus, small intestine, colon, bladder and spleen (Alvarenga, 1991). This paper discusses the surgical management of inguinal hysterocele in a bitch.

## CASE HISTORY AND OBSERVATIONS

A 9 year old female spitz was presented with the history of left side (unilateral) inguinal swelling as well as not passing feaces and urine since two days. The animal comes to heat regularly. Physical examination revealed irreducible soft mass on the inguinal region.

## TREATMENT AND DISCUSSION

Food was withheld for 12 hours before surgery and the dog was allowed to take water upto 2 hours prior to surgery. Cefotaxime and meloxicam were administered intravenously, at a dose rate of 20 mg/ kg b.wt and 0.2 mg/kg b.wt, respectively. The surgical site was prepared aseptically. The animal was premedicated with atropine sulphate at the dose rate of 0.04 mg/kg b.wt, intramuscularly followed by xylazine hydrochloride at a dose rate of 1 mg/ kg b.wt intramuscularly. General anaesthesia was induced with an anaesthetic mixture containing 100 mg of ketamine hydrochloride and 2.5mg of diazepam at the dose rate of 5 mg/kg. bd wt of ketamine hydrochloride and 0.125 mg/kg. bd. wt of diazepam, intravenously. The anaesthesia was maintained with 1/3 to ½ of induction dose of above mixture intermittently as and when required.

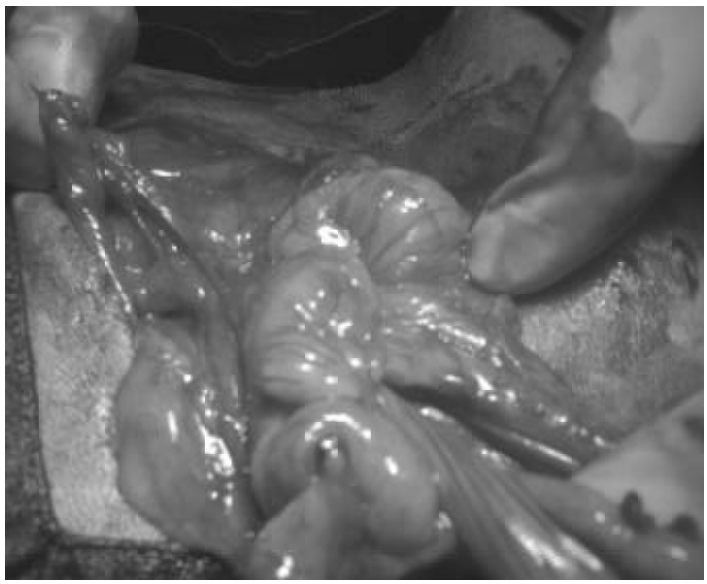

**Fig. Herniated uterus**

An incision was made on the lateral aspect of the swelling, parallel to the flank fold. Inguinal sac was exposed through blunt dissection and the content was reduced. The sac was opened and the canal was enlarged by incising through the inguinal ring in a craniomedial direction. The herniated mass was found to uterus (fig.) and hence panhysterectomy was performed. The neck of the hernial sac was ligated as close to the

internal inguinal ring and the sac was amputated. Enlarged external ring and skin were apposed using no -1 PGA and silk.

Estrogen production is considered to have a close relationship to development of inguinal hernia (Roberts, 1971). Sex hormones may change the strength and characters of connective tissue, weakening or enlarging the inguinal ring (Peacock and Winkle, 1975). Weakening of the abdominal wall may be due to altered nutritional or metabolic status of an animal (Parkes, 1981). Accumulation of fat around the round ligament may dilate the vaginal process and inguinal canal, allowing herniation (Ashdown, 1963). Inguinal hernia is generally best repaired at the time of diagnosis, delay might result in increased risk of complication. Spaying can prevent the occurrence of inguinal hysterocele in bitches. Prognosis for uncomplicated repair of inguinal hernia was good to excellent (Bellenger, 1996). The bitch had an uneventful recovery.

**REFERENCES :**

Alvarenga, J. (1991). Mod.Vet. Pract., **56**: 35.

Ashdown, R.R. (1963). Vet. Rec., **75**:1345.

Bellenger, C. R. (1996). Aust. Vet. Pract., **26**:58.

Dorn, A. S. (1981). Mod. Vet. Pract., **66**:621.

Elkins, A. D. (1983). J. Am. Anim. Hosp. Assoc., **19**:309.

Hayes, H. M. (1974). Am. J. Ve.t Res,. **35**:839.

Parkes, J. (1981). Herniation. In Bojrab, MJ (ed): Pathophysiology in Small Animal Surgery. Lea and Febiger, Philadelphia, p 420.

Peacock, E. E and W.Van Winkle. (1975). Wound dehiscence. In Peacock, E. E and W. Van Winkle (ed): Wound repair. W. B. Saunders, Philadelphia, p. 466.

Roberts, S. J. (1971). Veterinary Obstetrics and Genital Diseases (Theriogenology) 2nd Ed Edward Brothers. Ann Arbor, Mich, p 287.

Water, D. J. (1993). Vet. Surg., **18**: 286.

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