Case Report

SURGICAL MANAGEMENT OF UNILATERAL INGUINAL HERNIA IN A GERIATRIC BITCH – A CASE REPORT

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ABSTRACT

A Ten year old intact dachshund bitch weighing around 13kgs body weight was presented with the history of pendulous swelling on the caudal ventral abdomen for past six months. On palpation, swelling was soft, painless and reducible. On radiographic examination, herniated intestinal loop was noticed. Haematobiochemical values were within normal range except for mild neutrophilia. Based on the clinical examination and radiographic evaluation, it was diagnosed as inguinal hernia. Herniorrhaphy and ovariohysterectomy was performed under general anaesthesia. Postoperatively, antibiotics and analgesics were administered for 7 and 3 days, respectively. No postoperative complication was recorded and the animal recovered uneventfully.

Keywords: *Geriatric dog, herniorrhaphy, inguinal hernia*

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Inguinal hernia refers to a swelling on the caudal ventral abdominal region that occurs as a result of protrusion of abdominal contents through a defect in the inguinal ring (Jettennavar *et al.*, 2010). The causes of inguinal hernia can be classified either congenital or acquired. Acquired inguinal hernias are relatively common in dogs and most often involve the middle aged intact bitches (Jahromi *et al.*, 2009) and are mostly due to trauma that weakens the abdominal musculature resulting in abnormality of the inguinal ring. Contents of inguinal hernia may include omentum, fat, ovary, uterus, small intestine, colon, bladder and spleen. Diagnosis of inguinal hernia is accomplished by radiography and ultrasonography (Abdin-Bey and Ramadan, 2001). This report describes the diagnostic and the surgical treatment of inguinal hernia in an intact dachshund bitch.

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CASE HISTORY AND OBSERVATIONS

A ten-year-old intact dachshund bitch was presented to People for Animal, Ponda, Goa with the history of pendulous swelling on the caudal ventral abdomen for past six months. Physiological parameters such as body temperature, heart rate and respiratory rate were within the normal limits. On clinical examination, the swelling was soft, painless and the abdominal rent with reducible contents was palpated measuring around 15cm by 8cm

in length and width, respectively (Fig. 1).On radiographic findings, herniated intestinal loops protruding out of the body wall was noticed and the abdominal cavities revealed two distinct soft tissue opacities in the caudal abdominal part of inguinal region was detected (Fig. 2). Haematological and biochemical values were within normal range except for the mild neutrophilia. Based on the history, clinical observation and diagnostic evaluation, the case was diagnosed as inguinal hernia and decided to perform herniorrhaphy along with ovariohysterectomy.

TREATMENT AND DISCUSSION

General anaesthesia was achieved with inj.diazepam @ 0.5 mg/kg b.wt as a premedicant and induction and maintenance by inj.propofol @ 4 mg/kg b. wt intravenously. Aseptic preparation of the surgical site was done and the animal was positioned in dorsal recumbency. A linear skin incision was made over the hernia to allow exposure of the hernial sac. On exploration, the whole uterus along with the broad ligaments and the intestinal loops with omentum was contained in the hernial sac (Fig. 3). Ovariohysterectomy was performed, the hernial contents including omentum were reduced into the abdominal cavity and herniorrhaphy was performed (Fig. 4) by suturing the hernial ring by a overlapping suture pattern using poyglactin size 1-0. The subcutaneous tissue was apposed in subcuticular suture pattern. Skin was closed in a horizontal suture pattern using polyamide size 0. (Fig. 5) Postoperatively, oral Tab. Cefotaxime sodium @ 20 mg/kg b.wt twice daily and Tab. Meloxicam @ 0.2 mg/kg b.w tonce daily were advised for 7days and 3days, respectively. Surgical wound was protected with povidone iodine gauge and bandaged. Skin sutures were removed on 10th postoperative day.

Unilateral hernias are much more common than bilateral inguinal hernias (Alireza *et al.*, 2009). In the present case, the inguinal hernia was unilateral and contra lateral inguinal ring was not involved. Diagnosis of inguinal hernia can be achieved by history, clinical evaluation, radiography and ultrasonography (Abdin-Bey and Ramadan, 2001). In this case, plain radiography was employed to confirm the condition. The uterus within a hernia may also protrude and limit the movement of the small intestine in the sac with less risk for incarceration (Alireza *et al.*, 2009). The intestines, along with the omentum, uterus and ovary with mild adhesion were present in this case. Conventional hernial repair through the inguinal ring (Waters *et al.*, 1993) or a ventral midline incision parallel to the flank folds lateral to the hernial ring are feasible (Azari *et al.,* 2008). If further breeding is not intended, an ovariohysterectomy may be performed (Gogny *et al.,* 2010). Incisional dehiscence and hernia recurrence were reported as complications in the surgical correction of inguinal hernias (Jahromi *et al.,* 2009). In the present case, no such postsurgical complications were observed, and the animal recovered uneventfully.

Fig. 1:Soft swelling noticed on caudal ventral abdomen

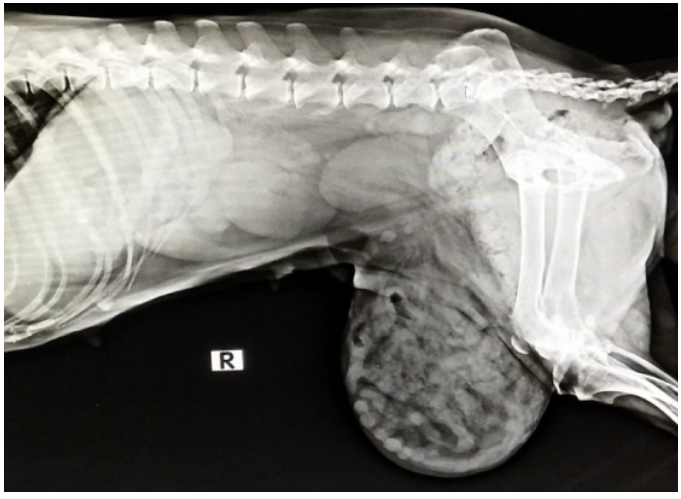

Fig. 2: Tightly packed loops of intestines protruding out of the body wall

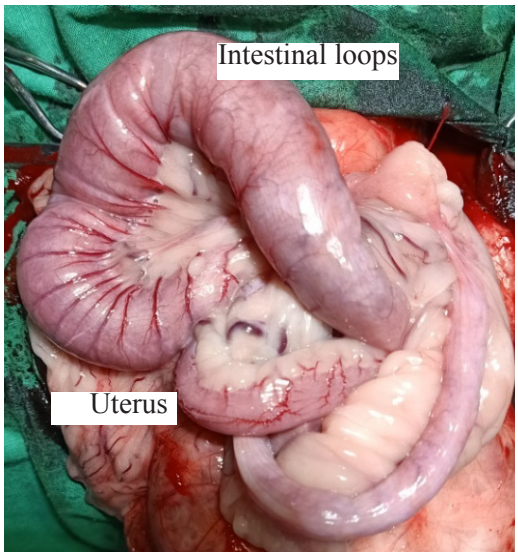

Fig. 3:Intraoperative photograph showing intestinal loops, omentum and uterine bod

Fig. 4:Repair of the hernial ring – Herniorrhaphy

Fig. 5: Immediate postoperative photograph showing the repair of the inguinal hernial ring

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