CLINICAL MANAGEMENT OF INGUINAL HERNIA IN A DACHSHUND PUP

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A four month old Dachshund male pup was presented to our TVCC with a pendulous swelling located on the caudal ventral abdomen. Diagnosis of inguinal hernia (Epiplcope) was confirmed by radiography and ultrasonography. Herniorrhaphy was done under general anaesthesia. Case was followed up for six months and incidence of recurrence of the condition was not reported.

Keywords: Inguinal Hernia, Epiplcope, Herniorrhaphy, Pup.

Inguinal hernia refers to a swelling on the caudal abdominal region that occurs as a result of protrusion of abdominal contents through a defect in the inguinal ring. The causes of inguinal hernia can be classified as either congenital or acquired. Congenital inguinal hernias in dogs are rare and often co-exist with the umbilical hernia (Bellenger, 1996). Congenital inguinal hernia develop more often in male dogs than in females, possibly due to delayed narrowing of the inguinal ring as a result of late testicular descent (Waters et al., 1993). The most commonly predisposed breeds of dogs are Basenji, Pekingese, Poodle, Basset hound, Cairn terrier, Chihuahua, Cocker spaniel, Dachshund, Pomeranian, Maltese and West highland terrier (Hayes, 1974). Acquired inguinal hernias are relatively common in dogs and most often involve the middle aged intact bitches (Waters et al., 1993) and are mostly due to trauma that weakens the abdominal musculature resulting in abnormality of the inguinal ring. Clinical signs often reflect the size of the hernia and the hernial contents and range from a painless inguinal mass to signs related to incarcerated or nonviable small intestine (Alireza et al., 2009). The present report describes the diagnostic and the surgical treatment of inguinal hernia in a Dachshund male Pup.

Case history and Clinical observations

A four months old male Dachshund pup weighting five Kilograms, was presented with a pendulous semi-circular and unilateral swelling on the left caudoventral abdominal region. Clinical examination revealed that the patient was emaciated, depressed and dehydrated. Rectal temperature, femoral pulse and respiratory rate were 39°C, 108 beats per minute and 20 breaths per minute respectively. The swelling was painless with a soft, doughy consistency and measured 3cm by 2cm in length and width respectively. The skin above the swelling was hyperaemic. The content within the swelling retracted back into the abdominal cavity upon positioning the patient on dorsal recumbency with elevation of the hind quarters. Radiograph of the left lateral abdomen, revealed the presence of radio-lucent gas filled intestinal loops surrounded by radio dense content (fluid, probably due to sequestration from the intestinal loops) in the swelling. Ultrasonography of the swelling revealed intestinal loops in the swelling as indicated by hypo echoic circular areas (indicating intestinal lumen) and acoustic enhancement due to air and fluids in the intestines. Based on these findings, a diagnosis of a left unilateral inguinal hernia was made.

Treatment

Herniorrhaphy was performed under General Anaesthesia. The dog was first sedated using Triflupromazine at a rate of 1mg/kg administered intramuscularly following which the caudal abdominal region including the swelling was prepared for an aseptic surgery.

General anaesthesia was induced using 1.25% Thiopentone Sodium 60mg administered intravenously ‘to effect’ and
maintained using the same. The patient was positioned for surgery in dorsal recumbency and dilute 5% povidone iodine solution was applied on the surgical site following which the area was draped. A skin incision on the ventral aspect of the hernial mass was made, using scalpel blade and extended using scissors. The hernial sac was then exposed by blunt dissection. The inguinal canal was enlarged to allow reduction of intestinal loops and omentum into the abdominal cavity. Excessive portion of this hernial sac was excised and margins were apposed using number 2/0 Prolene in a simple interrupted pattern and further reinforced using number 0 Vicryl in cruciate pattern. Excessive skin tissue was trimmed off dead space reduced and the skin edges were apposed using number 2/0 nylon in a simple interrupted pattern. Ceftriaxone at a rate of 25mg/kg and Meloxicam at a rate of 0.3mg/kg were administered intramuscularly immediately after surgery. Antibiotic ceftriaxone oral syrup at a rate of 30 mg/kg was administered for five consecutive days postoperatively. The follow up study for two weeks revealed a complete recovery with no complications. The case was followed up for six months and there was no incidence of reoccurrence.

Discussion
In this case, the inguinal hernia was unilateral and contra-lateral inguinal ring was not involved as earlier reported by Alizera et al. (2009). In this case, plain radiography and ultrasonography were used and intestinal loops appeared radiolucent in plain radiography and hypo-echoic circular areas in ultrasonography. Surgical management of inguinal hernia consists of identification of the hernial sac, assessment of the viability of the hernial contents, surgical resection of nonviable tissue, herniorrhaphy and in some instances, neutering as also reported by Alireza et al. (2009). Herniorrhaphy by simple interrupted or mattress suture was safe and quick to correct inguinal hernia without any complications.

Summary
A case of inguinal hernia in Daschaund Pup can be successfully managed by surgery and reposition of contents which will prevents the reoccurrence of the condition with proper postoperative care.

References