

## **Surgical Management of Abdominal Hernia in a Camel (*Camelus dromedaries*)**

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### **ABSTRACT**

In the present study abdominal hernia was recorded in a 5 year old male camel. This hernia was diagnosed on the basis of history and clinical examination. Football size swelling on right side of ventral abdomen shows presence of hernia with approximately eight finger hernia ring. Hernial ring was repaired by herniorrhaphy. The hernia ring was closed with overlapping mattress sutures. Postoperatively, administered oxytetracycline injection 1500 mg, I.V. for 7 days and phenylbutazone injection 3000 mg, I.M. for 3 days. The postoperative course was uneventful.

**Keywords:** Camel, Adomen, Hernia, herniorrhaphy

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Congenital as well as acquired hernia is common in domestic animals including camels (Ramdan, 2001). By far the most common hernias develop in the abdomen, when a weakness in the abdominal wall evolves into a localized hole through which adipose tissue or abdominal organs covered with peritoneum may protrude. Any traumas such as violent contact with blunt object, horn thrust, kick or abscess in abdominal cavity may lead to weaken the abdominal muscles resulting herniation of abdominal contents subcutaneously. Abdominal distension due to pregnancy or violent straining may lead ventral hernia (Tyagi and Singh, 2006). Different type of hernia reported in camels such as umbilical hernia (Gahlot *et al.*, 1994), abdominal hernia (Purohit *et al.*, 1985) or post caesarean hernia (Purohit *et al.*, 1989) etc.

Hernia classified as external or internal hernia and reducible or irreducible hernia. An excessively long caudal flank incision for caesarean section in camel may lead to hernia. It seems probable that pressure on the abdominal wall by increasing size and weight of the gravid uterus led to rupture of the already weakened muscle (Purohit *et al.*, 1989).

### **Case History and Observations**

A 5 year old male camel with football size swelling on right side of ventral abdomen since 5 months was presented. The clinical examination of swelling revealed the presence of reducible ventral abdominal hernia with approximately eight finger hernia ring (Fig. 1).



**Fig. 2: Skin sutured with silk after closing of hernial ring in a camel.**

## Surgical Management

Feed and water withheld from the camel 24 hour prior to surgery. Animal was restrained in left recumbency under xylazine sedation. Xylocaine hydrochloride 2% was infiltrated around the hernia ring. An elliptical incision was made on skin at the base of hernial sac. The hernial ring was closed by overlapping mattress sutures with nylon ribbon. The muscle and subcutaneous tissue sutured with catgut no.2. Skin was sutured with silk thread by simple interrupted suture (Fig. 2). Postoperatively, oxytetracycline injection 1500 mg, I.V. for 7 days and phenylbutazone injection 3000 mg, I.M. for 3 days was administered. Skin sutures were removed after 12 days.

## Discussion

In above case surgical procedure herniorrhaphy done as per the standard technique (Purohit *et al.*, 1989, Sharma *et.al.* 2003 and Jawre *et. al.*, 2009). The postoperative course was uneventful. If hernia is irreducible this can develop several complications such as strangulation, obstruction, incarceration and adhesion.

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