

## TRAUMATIC VENTRAL HERNIORRHAPHY IN A RAM LAMB – A CASE REPORT

Vinod Kadapatti<sup>1\*</sup>, K.M. Srinivasa Murthy<sup>2</sup>, H.K. Santosh<sup>3</sup> and B.N. Nagaraja<sup>4</sup>

<sup>1</sup>Veterinary Officer, Department of AH and VS, Government of Karnataka, India

<sup>2</sup>Assistant Professor, <sup>3</sup>Ph.D. Scholar, <sup>4</sup>Professor and Head

Department of Veterinary Surgery and Radiology, Veterinary College, KVAFSU, Hebbal,  
Bangalore - 560 024, India

E-mail: drvinodkadapatti@gmail.com (\*Corresponding author)

**Abstract:** A 4 months ram lamb weighing about 12 kg was presented to surgical clinics of Veterinary College Hospital, Hebbal, Bangalore, with a history of dog bite and huge swelling in the right ventral abdominal region since 15 days. The hernial ring was closed with simple interrupted suture pattern by using polyglactin 910 No. 1. The animal recovered uneventfully and discharged after skin suture removal on 10<sup>th</sup> post-operative day.

**Keywords:** Dog bite, Traumatic Hernia, Herniorrhaphy.

### Introduction

Hernia is the protrusion of a part of an organ or structure through the tissue that normally contains it (Lippincott and Wilkins, 2006). Hernias are also known as ruptures (Edward, 2005) and they could have many deleterious effects such as lowering the productivity and reproduction of the affected animals (Abdin-Bey and Ramadan, 2001). A typical hernia always consists of the “hernial ring” or an opening in the muscle which may have been brought about as a result of an accident or may have been present at birth; a swelling appearing below the skin “hernial sac” and the “hernial content” (Gyang, 1988 and Edward, 2005). Hernias can be caused by so many factors like horn-goring, falls, kicks, automobile accidents and increase in intra-abdominal pressure (Blood *et al.*, 1997). Sheep and goats are frequently presented with different forms of hernias to the veterinary clinics. Abdominal hernias may occur when the abdominal wall is severely traumatized and these hernias may be high or low in the flank, along the costal arch or between the last few ribs (Keown, 1974). Fahd and Ahmed (2007) observed a higher incidence of hernia in goats than sheep; however, Fadason *et al.* (2015) reported higher incidence in sheep as compared to goats.

### Case History and Clinical Observations

A 4 months ram lamb weighing about 12 kg was presented to surgical clinics of Veterinary College Hospital, Hebbal, Bangalore, with a history of dog bite and huge swelling in the right ventral abdominal region since 15 days. Physical examination revealed traumatic hernia on

the upper right flank region with protrusion of massive intestines to below the skin up to ventral abdomen and the contents were reducible in nature.



**Fig. 1. Figure is showing ventral hernia**

### **Treatment and Discussion**

On the base of severity of the condition, immediate surgical correction was undertaken. Lamb was withheld feed for 24 hours and water for 12 hours before surgery. The area around the swelling was prepared for aseptic surgery. The animal was sedated with inj. Xylazine hydrochloride @ 0.02 mg/kg BW intramuscularly and the area around the swelling was desensitized by infiltrating 8-10 ml of inj. 2% lignocaine hydrochloride in a ring manner. However, Parvez *et al.* (2016) sedated the animal by inj. Diazepam @ 0.5 mg/kg BW intravenously along with inj. 2% lignocaine as local anaesthetic, whereas Fahd and Ahmed (2007) sedated the animal with inj. 2% Xylazine hydrochloride @ 0.05 mg/kg BW intramuscularly in combination with circular infiltration anaesthesia was done using inj. 2% lidocaine @ 10 mg/kg BW.

Ventro-lateral oblique incision was given over the dorsal aspect of the swelling. After separating the skin and fascia by blunt dissection, hernial sac was reached. Then opened the hernial sac and found that the contents were intestinal loops. Hernial ring was located closer to the last floating rib and which was sutured by using polyglactin 910 No. 1 in a simple interrupted suture pattern. But, Fahd and Ahmed (2007) sutured the hernial ring depending on the size of the ring with simple interrupted pattern by using chromic catgut No. 2 and PDS

were used when the hernial ring was relatively small or silk can be used when the hernial ring was large. Then the surgical wound was closed in a routine manner by using standard suture technique. Herniorrhaphy can be done by simply closing the abdominal wall with a horizontal mattress pattern of stitches by using absorbable sutures (Pugh, 2002). Post-operatively, the animal was administered antibiotic such as inj. strepto-penicillin @ 10 mg/kg BW, intramuscularly once daily for 7 days and anti-inflammatory like inj. meloxicam @ 0.3 mg/kg BW intramuscularly once daily for 3 days. Fahd and Ahmed (2007) reported each animal was given post-operative therapy with inj. penicillin-streptomycin @ 30,000 IU/kg BW for the penicillin and 10 mg/kg BW streptomycin for 5 days and a prophylactic dose of anti-tetanus serum 1,500 IU subcutaneously. Wound dressing was carried out on alternative days. Moderate swelling appeared 48 hours post-operatively because of the accumulation of serous fluid in the dead space and this fluid was drained out by creating a counter opening in the dependent part and which was disappeared within 7-10 days. The lamb was recovered uneventfully. On 10<sup>th</sup> post-operative day, skin sutures were removed and the animal was discharged.



**Fig. 2. Freeing of hernial ring from adhesions**



**Fig. 3. Hernial contents as intestinal loops**



**Fig. 4. Closing of the hernial ring**



**Fig. 5. Apposing the skin edges**

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