Surgical Management of Hydrocele in Two German Shepherd Dogs
Dept. of Vety. Surgery & Radiology, College of Veterinary Science, Tirupati, Andhra Pradesh, India – 517502

*Corresponding author: drsaimvsc@gmail.com

Abstract
Two German shepherd dog aging six and eight years were presented to Department of Veterinary Surgery, Tirupati with the history of scrotal swelling. Physical examination revealed enlarged and pendulous scrotum. Ultrasonography and percutaneous drainage of fluids were performed. It revealed the presence of serous fluid in the intrascrotal structures, suggestive of hydrocele. Under general anaesthesia, scrotal ablation was performed. The animals were premedicated with atropine sulphate and xylazine hydrochloride. The animal was induced and maintained using propofol intravenously. Curvilinear incision was made on both sides at the base of scrotum and both the testes were separated and ligated using Chromic Catgut no.1. Both the testicles were removed along with the scrotal skin and scrotal septum. Subcuticular and skin sutures were placed. Regular post-operative care was given and both the animals had an uneventful recovery.

Key words: Hydrocele, German Sheperd Dog

Introduction
Hydrocele is a circumscribed collection of fluid in the vaginal process and along the spermatic cord. Hydroceles are congenital with spontaneous recovery in infants (Christensen et al., 2006) and secondarily caused in adults (Hsu et al., 2004). Composition of fluid varies with underlying cause of the condition. In bull, ascites and venous or lymphatic congestion are hypothesized causes (Shore et al., 1995). Reported primary conditions in dog include compromised lymphatic drainage due to testicular lymphosarcoma, inguinal hernia, orchitis, trauma, and testicular torsion. Hydrocele in dogs may also be idiopathic. The present paper puts on record, the surgical management of hydrocele in two German Shepherd Dogs.

Case History and Observation
Two German shepherd dog aging six and eight years were presented to Department of Veterinary Surgery, Tirupati with the complaint of scrotal swelling for the past 15 days and two months, respectively. Routine clinical examination was performed. All the vital parameters were within normal range. On physical examination, the scrotum was enlarged and pendulous in both the animals (Fig.1).
Fluid thrill was noticed on palpation of scrotum. Ultrasonography and percutaneous drainage of fluids were performed. It revealed the presence of serous fluid in the intrascrotal structures, suggestive of hydrocele. On diagnosis, it was decided to be managed surgically by performing scrotal ablation.

Fig 1: Enlarged & Pendulous Scrotum

Fig 2: Scrotal Ablation

Fig 3: Post Surgery

Treatment and Discussion

The animals were premedicated with atropine sulphate at the dose rate of 0.02g/kg body weight subcutaneously. Xylazine hydrochloride was administered at the dose rate of 1mg/kg body weight intramuscularly. The animal was induced and maintained using propofol at the dose rate of 5g/kg body weight intravenously. Both the animals were placed in dorsal recumbency and the scrotal area was prepared aseptically. Curvilinear incision was made on both sides at the base of scrotum. Careful dissection was made to avoid trauma of urethra and penis. The spermatic cord of both the testes was separated and ligated using Chromic Catgut no.1, separately. Both the testicles were removed along with the scrotal skin and scrotal septum (Fig 2). Subcuticular sutures were placed to avoid dead space using...
chromic catgut no.1. Skin was apposed using simple interrupted sutures using silk no.1 (Fig 3). Post operatively the dog was given Inj.Intacef 500mg twice daily for five days and Inj.meloxicam 1.5mL subcutaneously for three days. The wound was dressed daily with povidone iodine for one week. The animals made an uneventful recovery and sutures were removed on 10th post-operative day.

Percutaneous drainage of fluids may be performed blindly or with ultrasound guidance, as palpation of the scrotum is not diagnostic for hydrocele due to the turgidity of the grossly distended scrota. Scrotal contents should be imaged with ultrasonography which facilitated visualization of intrascrotal structures.

Penzhorn and Petrick (1986) reported hydrocele secondary to inguinal hernia in a young dog, which was successfully treated with surgical repair of the hernia and percutaneous drainage of intrascrotal fluid postoperatively.

**Summary**

Dogs suffering with hydrocele can be diagnosed appropriately by ultrasound or by palpation after percutaneous drainage. Hydrocele can be best managed by performing scrotal ablation.

**References**