

SURGICAL MANAGEMENT OF TESTICULAR SEMINOMA - A CASE REPORT

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ABSTRACT

Testicular Seminoma was diagnosed in a five year old monorchid German Shepherd dog. After Ultrasoundscanning and laboratory examination, scrotal ablation was done to repair the condition.

INTRODUCTION

Testicular tumors are common and account for 4 to 7 percent of all tumors in male dogs. Most affected dogs are over 5 years of age, with a median age of 10. The majority of tumors occur in undescended testicles located in the inguinal canal or abdominal cavity. Tumors in descended testicles are less common (Grieco, V. et.al, 2008). The affected testicle is often larger and firmer than its neighbour and has an irregular, nodular surface. At times the testicle is normal size but feels hard. In this paper a case of Testicular Seminoma and its surgical management in a German Shepherd dog is discussed.

CASE PRESENTATION

A five year old German Shepherd dog was presented to Veterinary Polyclinic, Mannarkkad

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with a complaint of scrotal enlargement (Fig. 1). On detailed examination, the animal was found to be monorchid and it was confirmed by Ultrasonography. The scrotal sac was hard in consistency. Ultrasound scanning revealed thickened testicular wall and a homogeneous testicular mass of low echogenicity (Fig. 2). Cytological examination of Fine needle aspirate revealed confirmation of seminoma of testis. Hence decided to perform scrotal ablation.

The surgical site was prepared aseptically after restraining the animal. The dog was premedicated with Atropine Sulphate at the rate



Fig. 1 Dog with Enlarged Scrotum

0.45mg/kg body weight intra muscularly, followed by an intravenous bolus injection of Xylazine Hydrochloride at the rate 1 mg/kg body weight and Ketamine Hydrochloride at the rate 5 mg/ kg body



Fig. 2 Ultrasound scanning revealing homogeneous testicular mass of low echogenicity

weight. An elliptical incision was made around the base of the scrotum. Separated the scrotal skin and fascia to expose the spermatic cord. The testis was removed along with the spermatic cord and scrotal sac, after ligating the testicular artery and testicular vein separately. Apposed the skin incision in a horizontal mattress pattern. Parenteral medication was done using Inj. Amoxicillin-Dicloxacillin 500 mg for three days. The animal had an uneventful recovery.

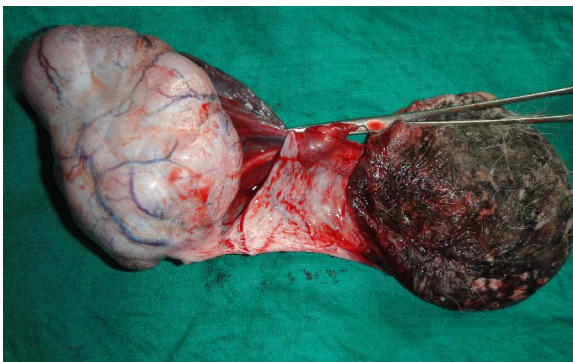


Fig. 3. Surgically Removed Testicular Tumour

DISCUSSION

Testicular tumours affect mostly the Boxer, German shepherd, Afghan hound, Weimaraner and Shetland sheepdog type of breeds.

There are three common types of testicular tumours. Sertoli cell tumours, seminomas and Leydig (interstitial) cell tumours. Seminoma is a unilateral, single, often benign tumour of the testis; however, malignant forms of the tumor have been reported in rare cases. It is the second most common tumor of the testis in male dogs, typically affecting older dogs (over the age of four). Seminomas develop due to cryptorchidism, a fetal abnormality which occurs when one or both testes fail to descend into the scrotum from where they develop in the abdomen (Hayes, H.M. Jr and Pendergrass, T.W. 1976). There is 16-times risk of developing seminoma in the cryptorchid testicle compared to descended testicle in dogs with unilateral cryptorchidism (Reif, J. S *et.al*, 1979). Seminoma in descended testicle found in younger dogs and associated with contralateral cryptorchid testicle. Ultrasound examination is a sensitive and relatively specific technique for the diagnosis of testicular tumours.

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