

Interstitial cell tumor of the left testicle in a dog

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ABSTRACT

A case of interstitial cell tumor of left testicle of a dog is put on record in the present communication.

Keywords : Dog, interstitial cell tumor

Testicular tumors are the second most common tumor affecting the male dog. Incidence of testicular tumors is higher in canines than any other species and interstitial cell tumor is the most common testicular tumors^{3,1,4}.

A dog aged 12 years was presented to PAU Veterinary Clinics with the history of enlargement of scrotal area since 20 days. The dog was dull, depressed and anorectic for the last 4 days. Scrotal palpation revealed enlarged (4-5 cm in diameter) and hard left testicle (Fig. 1). Some fluid was also evident all around the testis. However, right testicle was of normal size and consistency. It was decided to remove surgically the affected testicle.

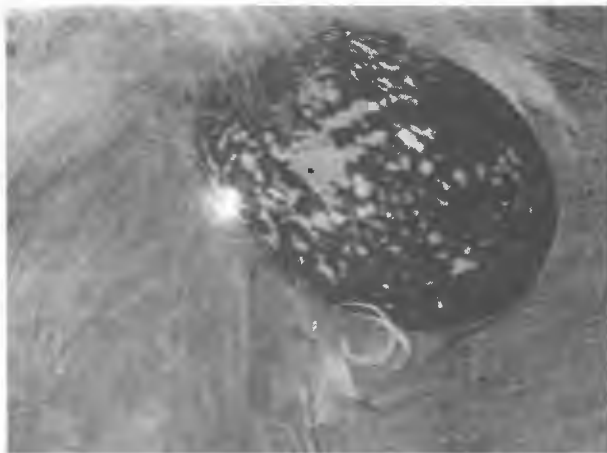


Fig.1 Enlarged left testicle

The clinical and blood parameters of dog on the day of surgery were temperature 102°F, heart rate 98/min, respiration rate 19/min, hemoglobin 6.2 gm%. Total leucocytes count -3600/mm³, neutrophils- 22, lymphocytes- 76 and monocytes- 2. Total plasma proteins were 4.29 g/dl.

After premedication with serenace, unilateral castration by open method was done under general anesthesia, induced and maintained with thiopentone. Left testicle was removed after transfixation of the spermatic cord using chromium catgut no. 1. The removed testicle was dark in colour and about 4 cm in diameter (Fig. 2). Post operative treatment with antibiotics and anti inflammatory was advised for one week. However, after 4 days the dog collapsed in spite of all the medications. Histopathology of testis revealed it to be an interstitial cell tumor.



Fig.2 Castrated left testicle

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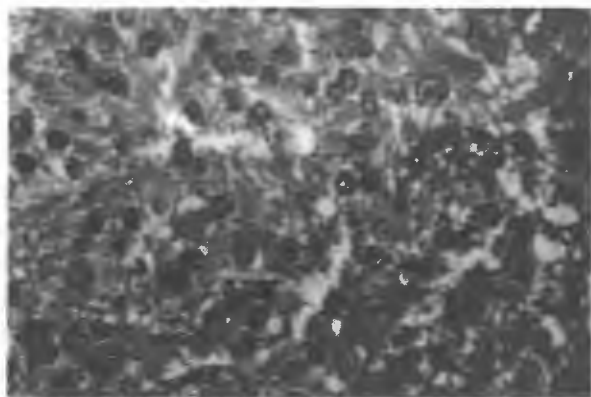


Fig.3 Microphotograph showing multinucleated interstitial cells

Causes of interstitial cell tumor are unknown. Cryptorchidism is considered to be a predisposing factor. However, in the present case both the testes were present in the scrotal sac. Often no clinical signs are observed in interstitial cell tumor as metastases of these tumors are rare¹.

Estrogen and testosterone levels can be elevated in interstitial cell tumor³. Increased testosterone may be associated with parial gland adenoma, perineal hernia, prostatic disease² but no such signs were seen in the present case. If associated with excessive secretion of estrogen, feminization of dog may occur. Excessive estrogen may have adverse effect and animal may develop anemia. Though estrogen was not estimated, the dog had a hemoglobin concentration of 6.2 gm percent which might be the reason for its death.

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