

Case Study

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Surgical Management of Paravaginal Lipoma in a Labrador Retriever Bitch– A Case Report

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ABSTRACT

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A Labrador Retriever bitch of four years old was presented with the history of gradually increase in the size of mass at extra-luminal paravaginal region since one year. On palpation, the mass was soft, fluctuating and drooping from supra-vaginal region. The dog was exhibiting clinical symptoms like vaginal bleeding, dysuria, licking of mass and discomfort. Microscopically, the lesional tissue revealed squamous cell proliferation with acanthosis, hyperkeratosis and horny epidermal cells with pseudo cystic inclusions of keratinized material and adipocytes, suggestive of lipoma. The mass was surgically excised successfully.

Introduction

Vaginal tumors are the second most common reproductive tumors next to mammary gland tumors in dogs, comprising 2.4–3% of all tumors in dogs (Brodey and Roszel, 1967). Lipoma is more appreciated in younger and obese dogs. It is a neoplasm originating from mesenchymal cells, infiltrating and manifest slow development. It mainly affects large breed dogs and presented as globular, painless, mobile and soft mass on palpation (Guedi *et al.*, 2014). The location of lipoma is varied, they are present in vagina and vulva in spayed and younger bitches (Fineman, 2004). Confirmatory diagnosis is based on histopathology of the sample through

aspirational cytology may give some idea about the type of tumor and its nature. The treatment of choice of this neoplasm is surgical and effective with low rate of complications, resulting in good prognosis.

Case history and clinical observations

A 4 year old Labrador bitch dog weighing about 30kg with drooping mass at paravaginal region was presented to the Department of Surgery and Radiology, Veterinary College Hebbal, Bengaluru. As per the history, the size of the mass is gradually enlarging since one year. The dog exhibited signs like licking of tumor, dysuria and discomfort while progression. Physical examination,

revealed soft, pliable, drooping mass at extra luminal paravaginal region (Fig. 1). Hematobiochemical parameters were in normal range. The mass was resected surgically.

Treatment and Discussion

The animal was fasted food for 12 hours and water for 6 hours. Enema was done to empty the rectum. Pre-operatively, the dog was sedated with Inj. Atropine sulphate @ 0.04mg/kg BW S/C and Inj. Xylazine @ 1mg/kg BW I/M. General anesthesia was induced with Thiopentone sodium @ 12.5mg/kg BW I/V and maintained with Isoflurane. The surgical site was prepared aseptically and restrained animal in lateral recumbency. An elliptical incision was made at the base of the tumor using electro cautery and bleeding was arrested by electrocoagulation. The mass was strongly adhered to the roof of vagina, just beneath the rectum. The part of vagina is excised to remove the tumor completely. The vaginal tear was closed by chromic catgut No. 1 in Halsted pattern. Coccygeal muscle, levator ani muscle and fascia were sutured using chromic catgut No. 1 by simple interrupted pattern, several interrupted sutures were placed to obliterate the dead space and skin was sutured

by polyamide No.0 by horizontal mattress pattern and wound dressing was done. The resected mass was weighed about 2 kg. A small tissue sample was collected in 10% NBF for histopathological examination. Post-operatively, tab. Cephalexin 600mg b.i.d. for 7 days and tab. Meloxicam 7.5mg s.i.d, orally for 5 days were prescribed. After 3 days of surgery, accumulation of seroma was observed, which subsided after proper evacuation and flushed the cavity with diluted povidone iodine solution. Later, the dressing was performed on alternate days for 15 days until the wound healed completely. In Haematoxylin and Eosin staining, the sample revealed as lipoma (Fig. 3).

The lipoma in dogs, observed in various locations like in the cervical region, thoracic region, on pelvic limbs, vulva, abdominal and thoracic cavities (Souza, 2006) but in this case, lipoma was present at paravaginal region. Most lipomas were located in a well-defined region usually subcutaneously at loose skin regions, facilitating easy surgical excision. When the tumor mass was resected en bloc with wide safety margin, had a good prognosis. Since this lesion has no metastatic properties, shows low rate of recurrence. Hence, in this case, the complete surgical excision of tumor was performed.



Fig. 1. Drooping 2 kilogram tumor from supravaginal region



Fig. 2. Excised tumor weighing around 2 kilograms.

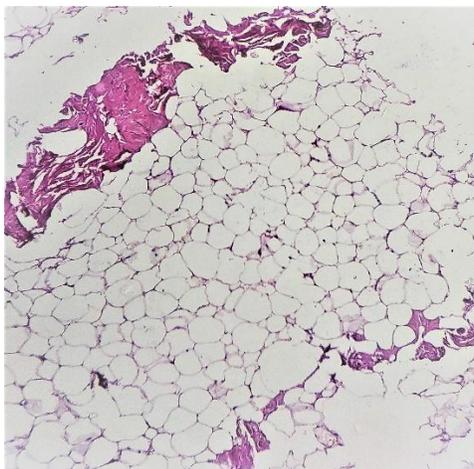


Fig.3.Photomicrograph showing benign adipocytes in dermis , suggestive of lipoma

Microscopically, tumour sampler revealed infiltration of well differentiated benign adipocytes with large vacuole and peripheral nucleus (signet ring appearance) (Panders and Scherpenisse, 1967). Intra-lesional injections of 10% calcium chloride solution inhibits lipoma development, but this treatment is not recommended because of irritation and necrosis of the skin (Albers and Theilen, 1985). The dog made uneventful recovery and had no recurrence of tumour with six months post-operative period.

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