

# SURGICAL MANAGEMENT OF VAGINAL FIBROMA IN A PUG

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Vaginal tumours are the second most common reproductive tumour in dogs (Srivastava *et al.*, 2013), comprising 2.4–3.0 percent of all tumors in dogs (Jubb *et al.*, 1993). Benign smooth muscle tumours such as leiomyoma, fibroleiomyoma, fibroma and polyps constitute 83% of the reported vaginal tumours in dogs (Thatcher and Bradley, 1983). Most of the vaginal tumours are benign and pedunculated often with a narrow stalk (Salomon *et al.*, 2004). Surgical excision provides better prognosis of benign tumors (Withrow *et al.*, 2013).

A four year old female pug was presented to the TVCC with the history of a mass seen from the vulvar lips since last fifteen days (Fig 1). Bloody discharge from vagina was also observed from last three days. Rectal temperature, heart rate and pulse rate were within the normal range. Gross examination revealed mild prolapse of the genitalia with swelling on the vulvar lips. Haematological analysis showed mild neutrophilia, while rest other parameters were within the normal limits. On clinical examination, hard mass was felt on the floor of the vagina near to the urethral orifice. Urethral opening was patent and the dog has normal urination. Lateral thoracic radiograph revealed no metastasis to lungs.

It was decided to surgically excise the tumourous mass. Anaesthesia was achieved by administration of atropine sulphate @ 0.054 mg/ kg body wt. s/c and xylazine hydrochloride @ 1.0 mg/ kg body wt. IM.

After 10 minutes, ketamine @ 8 mg/kg body wt. IV was administered. Surgical site was aseptically prepared and growth was resected out taking care to prevent damage to the urethral orifice (Fig 2 and 3). Bleeding was checked by ligating the blood vessels. Vaginal mucosa was closed with vicryl no. 1. Post operative care includes antiseptic dressing of the wound with povidone iodine, parental administration of Inj. Gentamicin @ 0.5 ml IM, Inj. Melonex @ 0.5ml IM and Inj. Avil @ 0.5 ml IM for five consecutive days. Animal recovered uneventfully on 7<sup>th</sup> postoperative day.

In the macroscopical examination, the tumour was found to be encapsulated, firm with solid and white appearance in cut surface. For histopathological evaluation, the tissue samples were fixed in 10% buffered formalin, embedded in paraffin wax and sectioned at 2-3 $\mu$ m, stained with hematoxylin and eosin (H&E). Histopathologically, neoplastic fibroblasts appeared as fusiform or stellate shape and have large, ovoid/elongated/ spindle hyperchromatic nuclei confirmatory for fibroma (Fig 4).

Vaginal masses are asymptomatic unless protruded from the vulva and can only be discovered during vaginal examination. In this case report, the mass was located at vaginal floor and only small part of it could be felt by vaginal palpation. Surgical resection of the neoplastic tissue was recommended as a treatment for benign vaginal tumours.



Fig 1 Tumourous mass seen from the vulvar lips



Fig 2 Surgical excision of the tumourous mass



Fig 3 Animal after excision of the tumourous mass

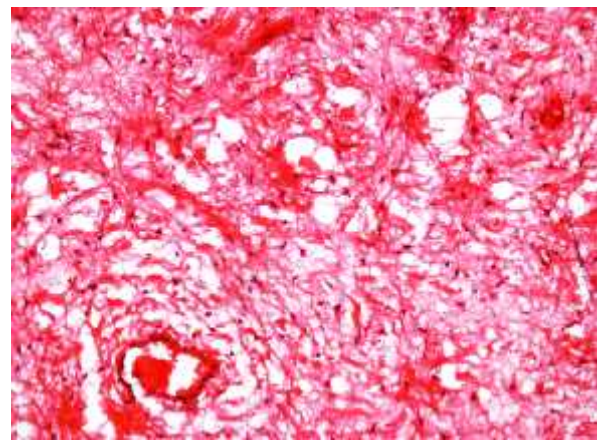


Fig 4 Fusiform or stellate shaped neoplastic fibroblasts with large, ovoid / elongated /spindle nuclei. (H.&E. x200).

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