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## Pathomorphological study on vaginal fibroma in a bitch: A case report

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**Abstract**

A 5 years old bitch was brought to the Jb Paws veterinary and diagnostic center, Aizawl, Mizoram with abnormal mass occupying in the vaginal region. Clinical examination revealed that there is a round circumscribed growth of about 6 cm diameter. Based on histopathological examination it was confirmed as vaginal fibroma.

**Keywords:** Canine, vaginal fibroma, gross, histopathology, H & E stain

**Introduction**

Tumors of female genital system in bitch occur most frequently in the vagina and vulva and rarely in the uterus or ovary. The vaginal tumors in conjunction with vulval tumors contribute to 2.4-3 percent of tumors in dogs (Brodey and Roszel, 1967) [3]. They are the second most common reproductive tumors next to mammary tumors in canine population. Most of the vaginal tumours are benign and pedunculated often with a narrowstalk (Salomon *et al.*, 2004) [7]. Surgical excision provides better prognosis of benign tumors (Withrow *et al.*, 2013) [8]. Vaginal fibromas are usually differentially diagnosed from vaginal polyps, lipoma, fibrosarcoma, vaginal leiomyoma, leiomyosarcoma, transmissible venereal tumor, lipoma and adenocarcinoma (Al-Kenanny *et al.*, 2013, Mcentee and Nielsen 1976, Wykes, 1986) [1, 6, 9].

**Materials and Methods**

A female of 5 years old bitch was brought to the Jb Paws veterinary and diagnostic center, Aizawl, Mizoram with the history of a solitary mass hanging from the vaginal region.

**Collection of samples**

The tissue from the vaginal mass (6cm diameter) was collected in 10% formalin for histopathological examination. Paraffin embedded tissue sections were cut into 4µm thickness and were stained with haematoxylin and eosin (H&E) (Luna, 1968) [5]. The slides were viewed under light microscopy.

**Results and Discussion**

The gross examination revealed that the vaginal mass was round circumscribed growth of about 6 cm diameter was observed. On Palpation the growth was hard in consistency and cut surface showed white fleshy appearance (1). Histopathologically, neoplastic fibroblasts appeared as fusiform or stellate shape and have large, ovoid/ elongated/ spindle hyperchromatic nuclei confirmatory for fibroma (2).

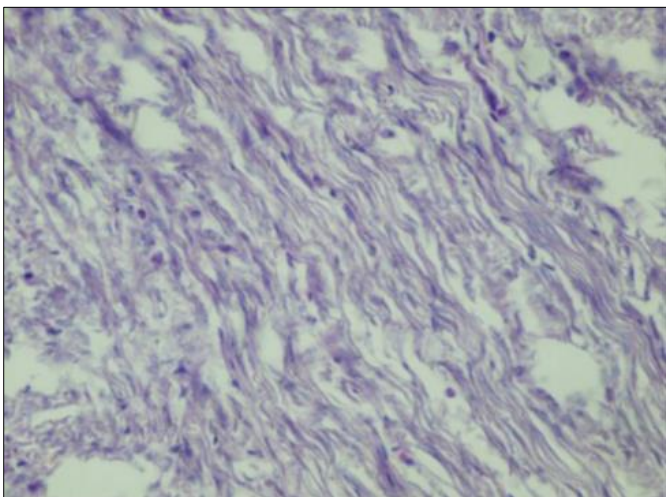
The gross and histopathological findings were in agreement with the findings of Das *et al.* (1989) [4], Ayyappan *et al.* (1994) [2] and Withrow *et al.* (2013) [8].

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**Fig 1:** Nodular growth on the vaginal region



**Fig 2:** Proliferating fibrocytes along having a more or less normal fibrocyte morphology (H & E, 400x).

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