

VULVAL FIBROMA AND ITS SURGICAL MANAGEMENT IN PARIAH DOG

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DOI 10.29005/IJCP.2024.16.1.77-79}

[Received: 17.03.2024; Accepted: 11.06.2024]

How to cite this article: Das, J.K. and Mahanand, B. (2024). Vulval Fibroma and Its Surgical Management in Pariah Dog. *Ind. J. Canine Pract.*, 16(1): 77-79.

One six year old female Pariah dog weighing 23kg body weight was presented for treatment of a large swelling at the upper commissure of vulva with reddish colouration, oozing of sero - sanguineous fluid. It was examined and diagnosed as a circumscribed tumor of 4 cm diameter at the upper commissure of vulva and planned for surgical excision under general anaesthesia. After histopathological examination of excised mass, it was found as a case of fibroma.

Keywords: Dog, Fibroma, Vulva.

Tumors of the lower reproductive tract are more common in bitches as compared to tumours of the upper reproductive tract (Saahithya *et al.*, 2018). Vaginal tumours are usually benign. Many of these tumours are pedunculated, often on narrow stalks. In rare cases, vaginal tumours are sessile, broad-based or irregular. They grow in a concentric way, either towards the vestibular area or towards the cervix (Igna *et al.*, 2016). Different vaginal tumours reported are fibroma, polyp, lipoma, fibroleiomyoma, neurofibroma, fibrous histiocytoma, benign melanoma, myxoma, myxofibroma, leiomyosarcoma, squamous cell carcinoma, haemangiosarcoma, osteosarcoma, adenocarcinoma, transmissible venereal tumour, mast cell tumour and epidermoid carcinoma (Umamageswari *et al.*, 2016). The case was probably diagnosed as fibroma as per age, site, duration of occurrence and consistency. Hence the tumor like growth of the dog was successfully excised surgically. It was followed up for 9 months without any recurrence.

Case history and Observations

One six year old female pariah dog weighing 23kg body weight was presented for treatment of a large swelling at the upper

commissure of vulva with reddish colouration with oozing of sero- sanguineous fluid was presented to the Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Odisha University of Agriculture and Technology, Bhubaneswar. Clinical examination revealed 103⁰ F rectal temperature with heart beat of 82 per minute and respiration 22 times per minute. On physical examination it revealed a circumscribed tumor like growth of 4 cm diameter located at 0.5 cm deeper the upper commissure of vulva (Fig No.1). It was seen for last one year and treated locally with antibiotics and anti-inflammatory for longer period without responding. It was painted with povidone iodine and a course of antibiotic like ceftriaxone sodium @ 20mg/kg bwt. I/V twice daily for 5 days and analgesic like meloxicam @ 0.2 mg/kg bwt for 3 days. Then it was planned for surgical excision and was removed surgically by following standard operating procedure under general anaesthesia. After histo-pathological examination it was found as a case of fibroma.

Surgical Treatment

The dog was maintained with liquid diet for two days prior to surgery with fasting for 12 hours. The animal was prepared for surgery as per standard operating procedure (SOP). The animal was premedicated with inj. Glycopyrrolate @ 0.01 mg/kg bwt, inj. Butorphanol @ 0.2 mg/kg bwt intramuscularly (IM). Then it was sedated with dexmedetomidine @ 5mcg/ kg bwt intravenously (IV). Anaesthetic induction was done with Zoletil™ @ 7 mg/kg bwt IV and it was maintained with 1.5 % isoflurane. A circumscribed incision was made on skin over the base of the mass at the upper commissure of vulva. After separating subcutaneous tissue, the underlying growth was bluntly dissected out (Fig No.2). Haemorrhage was

controlled and so also cryocauterization was done by application of liquid nitrogen (LN₂). The subcutaneous tissue was sutured in continuous pattern using chromic catgut no. 1 to avoid dead space created by the removed mass. The skin was sutured with criss-cross mattress suture pattern using nylon no.1. The sutured line was painted with povidone iodine lotion. Parenteral antibiotics inj. ceftriaxone sodium @ 25 mg/kg.bwt., analgesic inj. Meloxicam @ 0.2mg/kg.bwt. were given once daily for five days along with regular dressing. Elizabethian Collar was applied in neck to prevent self mutilation. Collected tissue sample of the mass was sent to the laboratory for histopathological examination.



Fig. no. 1- A GROWTH ON VULVA

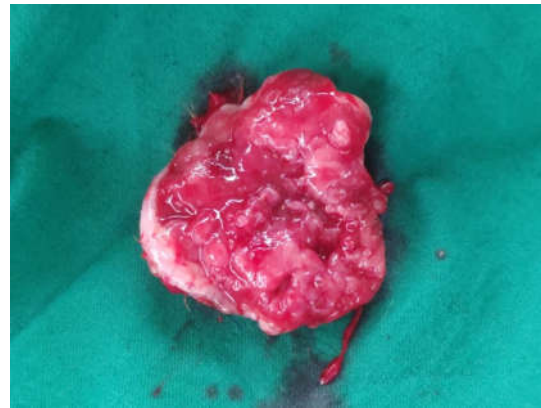


Fig no. 2- RESECTED MASS

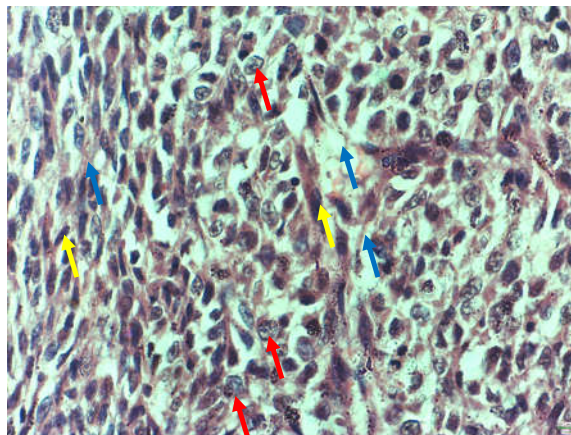


Fig. no. 3. PHOTOMICROGRAPH OF TISSUE SAMPLE OF FIBROMA SHOWING THE AGGREGATION OF FIBROBLASTS (RED ARROW) AND FIBROCYTES (YELLOW ARROW) IN THE MATRIX. MARK THE NEWLY SECRETED SMALL COLLAGEN FIBRILS (BLUE ARROW). H & E × 400

Results and Discussion

The dog recovered smoothly from anesthesia. Regular dressing was done using povidone iodine ointment. The surgical wound healed properly without showing any complication, skin suture was removed after 12 day of surgery. Similar observations were also noted by Verma *et al.*, 2019, Saha *et al.*, 2020. The animal was able to urinate properly. The histo-pathological examination of the tissue sample showed the aggregation of fibroblasts and fibrocytes in the matrix along with small collagen fibrils revealing a case of fibroma (Fig No. 3). The animal was followed up for 9 month and no recurrence was found which may be due to complete excision as opined by Gajendirane *et al.* (2023) followed by cauterised with monopolar electro-cautery.

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