

# CUTANEOUS FIBROMA AND ITS SURGICAL MANAGEMENT IN A DOG

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One seven year old male German shepherd dog was presented with history of a conical mass hanging near the right flew (lip) region since four months. Fine needle aspiration confirmed it as a tumour mass and it was decided for surgical excision. Under general anaesthesia the tumour mass was excised. Histopathological examination revealed it as a case of fibroma. The dog recovered uneventfully.

**Keywords:** Dog ; fibroma; surgical intervention

## Introduction

Cutaneous tumors represent approximately one third of all the canine tumors and are of considerable importance in small animal practice (Dobson and Gorman, 1988). Tumours of skin and subcutis are the most frequent tumours in dog. Detection of these tumours is common because they are either visible or palpable, prompting the client or clinician to pursue further diagnostic and therapeutic options (Slatter, 2003). Among them benign fibromas and lipomas are common superficial tumors in dogs (Preister and Mackay, 1987). In present communication fibroma near flew (lip) region of a dog has been reported with its therapeutic process and outcome.

## Case History and Diagnosis

One seven year old male German shepherd dog was brought to the Department of Surgery and Radiology, College of Veterinary Science and Animal Husbandry, OUAT, Bhubaneswar with a history of a conical mass like outgrowth hanging near the right flew region (Fig.1). It was gradually enlarging since four months. The mass was creating problem while feeding and the dog was spending most of the time in shaking its head. On close examination it revealed that the base of the growth was attached by a stalk to the skin near right flew region. The mass

was in ulcerated state at the distal end. Bleeding was seen due to repeated obstacle during feeding causing irritation. Physical examination and fine needle aspiration confirmed it as a hard tumour mass. It was decided for surgical excision.

## Surgical Treatment

The dog was premedicated with Atropine sulphate @ 0.04mg/kg body weight and Xylazine HCL @ 1mg/kg body weight intramuscularly. The general anaesthesia was inducted and maintained by Ketamine hydrochloride @ 5 mg/kg body weight intravenously. The dog was restrained on lateral recumbency keeping the affected side upward. The site was prepared for aseptic surgery. A curved incision was given around the base of the mass and the tumour mass was excised completely. Bleeding was checked by application of haemostatic forceps and application of ligatures. Deep tissue around the stalk of tumour was excised to avoid further recurrence. While excising the underneath tissue care was taken to avoid opening of oral mucosa. The skin wound was closed by interrupted sutures using nylon. The excised mass was sent for histopathological study. Post-operatively the patient was administered with antibiotic injection ceftriaxone @ 10mg/kg body weight was given for 5 days and meloxicam @

0.2mg/kg body weight was for 3 days. The owner was advised to wear socks on the paws of dog to avoid self mutilated injuries. On 12<sup>th</sup> post-operative day the sutures were removed and the dog recovered well.

### Results and Discussion

In the present case the tumour mass was of cone shaped having dimension of

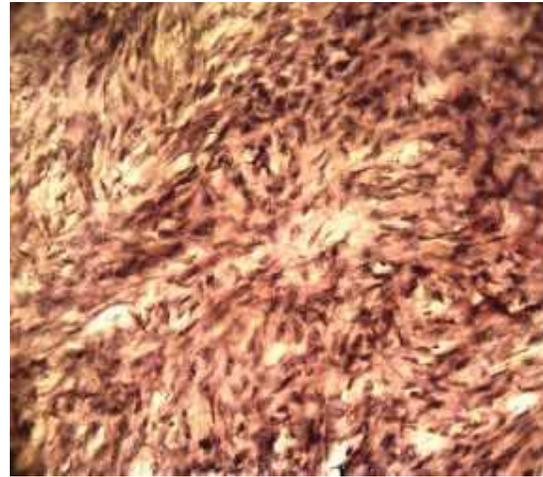


**Fig.1. Ulcerated tumour mass near flew region**

cosmopolitan and benign neoplasm of fibroblasts. Lesions are typically solitary, well-circumscribed, dome-shaped or pedunculated and dermal or subcutaneous in location. They may be firm or soft and may achieve a size of 50 cm in diameter. Larger lesions may be alopecic, hyperpigmented and ulcerated (Scott, 2007). It was solitary, cone shaped, cutaneous, firm and ulcerated form. Fibromas can arise from any place where connective tissue is available and macroscopically the hard fibroma is round and firm (Sastry, 1983). Since connective tissue is abundant in all parts of the body, fibromas occur anywhere and the most common site is the subcutaneous tissue of the head, neck, shoulder and leg (Vegad, 2012). In the present case it was seen near flew region which was generally an uncommon site. There was no exact evidence to determine the cause of origin, however

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4.5cm, 5cm and 13cm in length, breadth and circumference respectively. Histopathological finding of excised mass revealed it as a case of fibroma. Microscopically it was composed of fibrous connective tissue cells with spindle-shaped, angulated and stellate fibroblasts. Nuclei of fibroblasts were polymorphous, hyperchromatic and without mitotic figures (Fig.2). Fibroma is a common,



**Fig.2. Photomicrograph of the tumour mass**

evidence of prior injury or inflammation of the part might be the possible cause (Jubb and Kennedy, 1963). A primary injury might be arise at that site due to injury by teeth or bony prominence in non-veg diet or any external object which leads to origin of tumour in course of time.

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