

CUTANEOUS LIPOMA IN A DOG AND ITS SURGICAL MANAGEMENT

K. Manoj Kumar¹, D. Sai Bhavani and Makkena Sreenu

Department of Veterinary Surgery & Radiology,
College of Veterinary Science, Gannavaram, Andhra Pradesh, India– 521502

¹E-mail: manojvety12@gmail.com

Abstract: A seven year old female Pomeranian dog was presented with history of large size swelling at the ventral abdomen adjacent to the body of penis. Fine needle aspiration biopsy revealed large number of lipid globules along with cells. The tumour mass was excised surgically and subjected to histopathological examination confirming lipoma.

Keywords: Dog, Lipoma

Introduction

Lipomas are benign tumours arising from mature adipocytes, most common in dogs and cats. The adipose tissue tumours are common mesenchymal skin tumours of dogs with higher incidence in old female dogs (Julie *et al.*, 2013). Lipomas are benign tumours arising from mature adipocytes. The Lipomas located between skin and muscle layers are soft and freely movable while those located between muscles have a more firm consistency and are not mobile. Lipomas are classified as simple (non-infiltrative) and infiltrative. Simple lipomas can be easily dissected out easily. Infiltrative lipomas grow into adjacent muscles and tissues with moderate tendency to reoccur. Being benign tumours, surgical excision is the right choice of treatment (Veena *et al.*, 2013). A case of Lipoma in a dog with its confirmatory diagnosis and surgical management is reported.

Case history and observations

A seven-year-old male Spitz dog weighing 12 kg was presented to the Veterinary Hospital, Vinjamur with a history of large size swelling at the ventral abdomen adjacent to the body of penis (Fig.1). The growth on thigh was first noticed about 1 month back. There was a gradual increase in size of the growth since last 10 days. The animal had been treated with antibiotics for the same and no improvement was noticed. On palpation, mass was semisolid in consistency, located subcutaneously and was moving freely indicating absence of attachment to structures beneath it. The clinical parameters like heart rate, respiration rate and temperature were within physiological limits. Haematobiochemical parameters were also

normal. Radiograph of thorax revealed no lung metastasis. Fine needle aspiration biopsy revealed large number of lipid globules along with cells. The case was tentatively diagnosed as Lipoma, a skin tumour and was decided to perform surgical excision of mass.

Treatment and discussion

Dog was prepared for aseptic surgery and premedicated with Atropine sulphate @0.045 mg/kg body weight subcutaneously, followed by xylazine hydrochloride @ 1 mg/ kg body weight intramuscular and general anaesthesia was induced with propofol @ 5mg/ kg body weight intravenously. The dog was restrained in dorsal recumbency. An elliptical skin incision was given and following blunt dissection, the tumorous growth was removed completely (Fig. 2) and sent for histopathological examination. To avoid anatomical dead space and accumulation of serosanguinous fluid, subcutaneous tissue was opposed with subcuticular sutures, using chromic catgut no. 0. Skin was sutured with cruciate mattress sutures using no. 1 surgical silk. Post operatively inj. Ceftriaxone @ 20 mg/ kg b.wt for 5 days and inj. Meloxicam @ 0.5 mg/ kg b.wt for 3 days were given. Antiseptic dressing of suture line with povidone iodine was advised. The animal recovered uneventfully, the sutures were removed after tenth postoperative day. Excised tumour growth was subjected to histopathological examination which revealed polyhedral closely packed cells with several vacuoles and nucleus was pushed to one side (Fig. 3).

Lipomas are commonly encountered in dogs, occasionally identified in cats and horses and rarely in other domestic species. These neoplasms may occur anywhere in dogs, but commonly arise in subcutis of chest, abdomen, legs and axillae. Lipomas occasionally develop within thoracic or abdominal cavity and less commonly some lipomas occur between muscles in caudal thigh region. The tumor of adipose tissue can be divided into benign (lipomas) and malignant neoplasms (liposarcomas). Although they may resemble one another macroscopically, they are histopathologically distinct (Baez *et al.*, 2004). Among these tumors, lipomas are much more common than liposarcomas (Vegad, 2012). The present case was followed after surgery and there was no recurrence of tumor up to one year. The reason for non recurrence in present case might be due to its complete excision and early diagnosis as opined by Rao *et al.* (2011).

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Fig: 1 semi solid tumor mass at the ventral abdomen adjacent to the body of penis



Fig: 2 Mass from ventral abdomen after removal

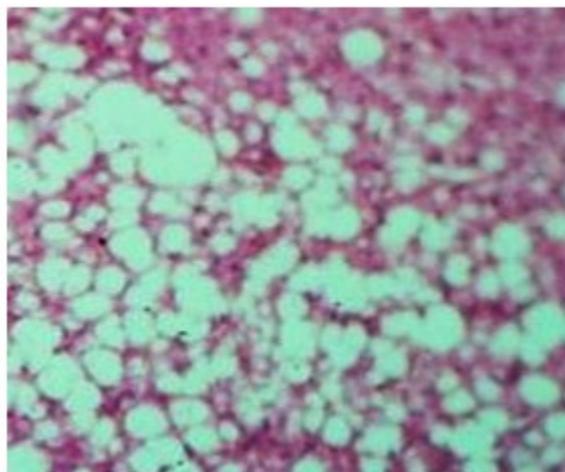


Fig: 3 Histopathological confirmation of Lipoma (H & E 70)