



ISSN (E): 2277- 7695
ISSN (P): 2349-8242
NAAS Rating: 5.03
TPI 2020; SP-9(4): 205-206
© 2020 TPI

www.thepharmajournal.com

Received: 03-02-2020

Accepted: 04-03-2020

S Vigneshwaran

Department of Veterinary Surgery and Radiology, Veterinary College and Research Institute Tamilnadu Veterinary and Animal Sciences University (TANUVAS) Namakka, Tamil Nadu, India

S Kathirvel

Department of Veterinary Surgery and Radiology, Veterinary College and Research Institute Tamilnadu Veterinary and Animal Sciences University (TANUVAS) Namakka, Tamil Nadu, India

K Jayakumar

Department of Veterinary Surgery and Radiology, Veterinary College and Research Institute Tamilnadu Veterinary and Animal Sciences University (TANUVAS) Namakka, Tamil Nadu, India

A Kumaresan

Department of Veterinary Surgery and Radiology, Veterinary College and Research Institute Tamilnadu Veterinary and Animal Sciences University (TANUVAS) Namakka, Tamil Nadu, India

G Vijayakumar

Department of Veterinary Clinical Medicine, Veterinary College and Research Institute Tamilnadu Veterinary and Animal Sciences University (TANUVAS) Namakka, Tamil Nadu, India

M Sasikala

Department of Veterinary Pathology Veterinary College and Research Institute Tamilnadu Veterinary and Animal Sciences University (TANUVAS) Namakka, Tamil Nadu, India

P Srinivasan

Department of Veterinary Pathology Veterinary College and Research Institute Tamilnadu Veterinary and Animal Sciences University (TANUVAS) Namakka, Tamil Nadu, India

Corresponding Author:

S Vigneshwaran

Department of Veterinary Surgery and Radiology, Veterinary College and Research Institute Tamilnadu Veterinary and Animal Sciences University (TANUVAS) Namakka, Tamil Nadu, India

Surgical management lipoma in a geriatric dog

S Vigneshwaran, S Kathirvel, K Jayakumar, A Kumaresan, G Vijayakumar, M Sasikala and P Srinivasan

Abstract

An eight year old non-descript geriatric male dog weighing 22 kg was presented with progressive swelling in the right shoulder region. The vital signs were within the normal limits and the swelling was movable, soft in consistency and puffy in nature. Fine needle aspiration biopsy was suggestive of lipoma. Thoracic radiography revealed no pulmonary metastasis with absence of metastasis in radiography. Before induction of anaesthesia tramadol at the dose of 4 mg per kg and midazolam at the dose of 0.2 mg per kg body weight administered intravenously. Induction of anaesthesia was achieved using propofol at the dose of 4 mg per kg body weight intravenously and maintenance of anaesthesia was achieved under 2 percent isoflurane. Surgical debulking of the mass was done as per standard surgical procedure and histopathology of the mass confirmed the case as lipoma. The animal made an uneventful recovery on early diagnosis, selection of balanced anaesthetic protocol and proper postoperative management.

Keywords: Lipoma, geriatric dog, tramadol, propofol, balanced anaesthesia

Introduction

Lipomas are usually found in older and overweight dogs and the incidence of neoplasms increase with age (Moulton 1990) [3]. The incidence of lipid cell tumor is more common in old female dogs (Julie *et al.*, 2013) [1]. Lipomas are benign tumours arising from mature adipocytes, most common in dogs and cats. The tumours may be present in dermis or subcutaneous tissue. The size of these tumours may be 1cm to 30cms. Being benign tumours, surgical excision is the right choice of treatment (Veena *et al.*, 2013) [6]. This paper reports successful surgical management of lipoma under general anaesthesia.

Case History and Clinical Observations

An eight year old non-descript geriatric male dog weighing 22 kg was presented to Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with history of massive progressive swelling in the right shoulder region (Fig. 1). Clinical examination revealed vital signs within the normal limits. The swelling was movable, soft in consistency and puffy in nature. Fine needle aspiration biopsy was suggestive of lipoma. Radiological examination confirmed no signs of metastasis.

Treatment and Discussion

Surgical debulking of the mass was done under general anaesthesia. Tramadol was administered at the dose rate of 4mg per kg body weight intravenously, followed by midazolam at the dose rate of 0.2mg per kg body weight and propofol at the dose of 4mg per kg body weight were administered intravenously (i.v.). Oro-endotracheal intubation was carried out with cuffed Murphy type endotracheal tube. Maintenance of anaesthesia was carried out using small animal anaesthetic machine employing isoflurane at 2 per cent level throughout the entire surgical period.

The animal was positioned in left lateral recumbency. A 15cm linear skin incision was made and the mass weighing 3kg was removed manually since it was devoid of attachments. Bleeding points were arrested by ligation and dead space was obliterated by placing subcuticular sutures. The skin incision was closed by using horizontal mattress suture pattern. Postoperatively the animal was maintained with ceftriaxone 500mg i.v. for 7 days and tramadol at 4mg per kg body weight subcutaneously for 3 days. The skin sutures were removed alternatively on 10th and 13th postoperative day respectively to enhance better healing. On Gross examination the mass was smooth in nature and cut surface was yellow in color with oily in nature. The excised mass (Fig. 2) was weighing around 3kg and

histopathological study confirmed the mass as lipoma. Subapriya *et al.*, (2020) ^[5] reported that lipomas are commonly encountered in canine practice in recent times due to appreciable and awesome care and affection of pet owners over their pets, feeding them with more than their physiological requirements which often progress to fat accumulation, obesity and lipoma. In this present case also the same findings were observed. Surgical excision along with surrounding healthy tissue could be the better solution when compare to treatment with anti-neoplastic drugs. The inclusion of tramadol provided adequate analgesia and did not cause any significant respiratory depression. The anaesthetic protocol employed in this case provided better quality anaesthesia, smooth and safe recovery. Absence of recurrence was observed, this might be due to complete excision and early diagnosis and the same was opinioned by Kramek *et al.*, (1985) ^[2] and Rao *et al.*, (2011) ^[2].

Summary

An unusual case of massive lipoma in a male non-descript geriatric dog was reported. The inclusion of tramadol in the anaesthetic protocol provides adequate analgesia. Early diagnosis, selection of balanced anaesthetic protocol and complete surgical excision of the mass with proper postoperative care favors better outcome in geriatric dog.



Fig 1: Unusual sized lipoma



Fig 2: Excised mass from the swelling

References

1. Julie B, Raghavan KS, Jayesh V, Swapna SA, Pradeep MA, Sajitha I. Surgical Management of Liposarcoma in a dog. *Indian Veterinary Journal*. 2013; 90:97-99.
2. Kramek BA, Spaceman CJ, Hayden DW. Infiltrative lipoma in three dogs. *J Am. Vet. Med. Association*. 1985; 186:81-82
3. Moulton JE. *Tumours in domestic animals*, 3rd edn, University of California press, Berkely, 1990, 31-33.
4. Rao CM, Prasad BC, Krishna NVVH. Surgical Management of Lipoma in a Dog. *Veterinary World*

2011; 4:34.

5. Subapriya S, Vairamuthu S, Pazhanivel N, Ravi Sundar George, Gokulakrishnan M. Cutaneous lipoma in dogs. *Journal of Entomology and Zoology Studies* 2020; 8:17-19.
6. Veena P, Bharathi S, Devarathnam J. Surgical management of lipoma in a dog. *Intas Polivet*. 2013; 14:475-476.