



ISSN (E): 2277- 7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2021; 10(6): 179-180  
© 2021 TPI  
[www.thepharmajournal.com](http://www.thepharmajournal.com)  
Received: 17-02-2021  
Accepted: 30-03-2021

**Harmanpreet Singh Sodhi**  
Ph.D., Scholar, Department of  
Veterinary Surgery, GADVASU,  
Ludhiana, Punjab, India

**Jasmeet Singh Khosa**  
Assistant Professor, Department  
of Veterinary Surgery,  
GADVASU, Ludhiana, Punjab,  
India

**Umeshwori Devi**  
Assistant Professor, Department  
of Veterinary Surgery,  
GADVASU, Ludhiana, Punjab,  
India

## Surgical management of ear fibroma

**Harmanpreet Singh Sodhi, Jasmeet Singh Khosa and Umeshwori Devi**

### Abstract

Otitis externa is a chronic or acute inflammatory disorder of the external ear canal. External ear canal tumours are not uncommon in dogs and cats. Obstruction causes maceration, which might result in otitis externa. This case report describes diagnosis and successful surgical management of ear fibroma in a dog. A 3-year-old male Labrador retriever weighing 30kg was presented with a history of growth over right auditory opening from one year. Discharge was coming out of right ear and foul smell was present. There was no history of anorexia and animal was drinking water normally. No history of head shaking was present. Heart rate, respiration rate and body temperature of the dog were determined as 81/min, 22/min and 101.8°F in the clinical examination, respectively. Capillary filling time was calculated as less than 2 sec. Colour of mucous membrane was pink. No significant change was detected in skin elasticity. Defecation and urination were normal. Growth was resected under general anaesthesia with the help of bi-polar electro cautery.

**Keywords:** Canine, fibroma, ear tumour

### Introduction

Otitis externa is a chronic or acute inflammatory disorder of the external ear canal. It's crucial to keep in mind that the external ear canal is a unique cutaneous region. As a result, otitis externa is frequently one of the first indications of skin illness. The incidence of otitis externa in dogs ranges from 5 to 12 percent, but it is much less common in cats, with a rate of only 2% (Grono 1980) <sup>[1]</sup>. External otitis occurs in 8.7% of all animals seen at veterinary clinics. (Masuda *et al.*, 2000) <sup>[4]</sup> and could affect from 10 to 20% of dog population (Angus, 2004; Cole, 2004) <sup>[4, 6]</sup>. It is more common in dogs with pendulous ears (e.g. cocker spaniel), with auricular hypertrichosis (e.g. poodle) and those predisposed to seborrhoea. The occurrence of canine otitis externa is influenced by environmental factors. It is more common when the temperature and humidity are high. There has been no mention of a sex predisposition. External ear canal tumours are not uncommon in dogs and cats. Obstruction causes maceration, which might result in otitis externa. The most common tumours are the following (Guaguere and Guaguere-Lucas 1985, Rogers 1988) <sup>[2, 3]</sup>: Benign tumours: papilloma, sebaceous adenoma, ceruminous gland adenoma, fibroma. Malignant tumours: squamous cell carcinoma, basal cell carcinoma, sebaceous carcinoma, ceruminous gland adenocarcinoma, fibrosarcoma. Primary ceruminous tumours and growths that may affect the skin at any other site are both examples of neoplastic disorders of the ears. The majority of neoplasms in dogs are benign, however malignant tumours do occur. Devaney *et al.* (2005) <sup>[7]</sup> divides ear tumours into three categories: external, middle, and internal.

### History, clinical signs and diagnosis

The present clinical case report composed of a 3-year-old male Labrador retriever weighing 30kg referred to Small Animal Clinic at Guru Angad Dev Veterinary and Animal Science, Ludhiana.

Dog was presented with the history of growth (Fig. 1) over right auditory opening from one year. Discharge was coming out of right ear and foul smell was present. There was no history of anorexia and animal was drinking water normally. No history of head shaking was present. Heart rate, respiration rate and body temperature of the dog were determined as 81/min, 22/min and 101.8°F in the clinical examination, respectively. Capillary filling time was calculated as less than 2 sec. Colour of mucous membrane was pink. No significant change was detected in skin elasticity. Defecation and urination were normal.

Histopathology of growth revealed erratic distribution of deep-seated immature fibroblast bearing nucleoli along with several to many small blood vessels (angiogenesis) and

**Corresponding Author:**  
**Harmanpreet Singh Sodhi**  
Ph.D., Scholar, Department of  
Veterinary Surgery, GADVASU,  
Ludhiana, Punjab, India

widespread mononuclear cell infiltration suggestive of fibromatous growth suggestive of fibroma.

### Treatment

Cephalic vein was assessed via a 20gauge intravenous cannula for injecting normal saline solution, anaesthetics and other medicines throughout the intraoperative period and till the recovery from anaesthesia. The preanaesthesia consisted of a combination of butorphenol (Butodol manufactured by NEON Laboratories Limited) @ 0.2 mg/Kg, acepromazine (VETONE) @ 0.05 mg/Kg, and atropine (EKTEK manufactured by Pharma Cure Labs) @0.04mg/kg body weight, intramuscularly. Induction of general anaesthesia was done using injection propofol (NEOROF manufactured by NEON Laboratories Limited), intravenously @ 4mg/kg. A cuffed endotracheal tube was placed in the trachea and further anaesthesia was maintained with 1-2% isoflurane (ISOFLURANE USP manufactured by Raman & Well Pvt. Ltd) in 100% oxygen. Injection cefotaxime (Taxim manufactured by Alkem Health Science) was administered @ 20 mg/Kg, intravenously during operative period. Clipping and shaving around ear base was done. The dog was placed in lateral recumbency with the affected ear upper most. The surgical site was cleaned and scrubbed using chlorhexidine solution (Aceptik manufactured by Raman & Well Pvt. Ltd) and was painted with povidine iodine solution (Bectodine manufactured by Glide Chem Pvt. Ltd.) prior to surgery. After draping the right ear, growth was resected with the help of bipolar electro-cautery (Fig.2). Post-operatively dog was administered with cefotaxime @ 20 mg/Kg body weight i.m. twice a day for 5 days. Meloxicam was given i.m. @ 0.2 mg/Kg body weight once a day for 3 days. Otirel ear drops (2drops) thrice a day for 7 days.



**Fig 2:** After resection of ear growth



**Fig 1:** Growth over right auditory opening

### References

1. Grono LR. Otitis externa. In: Current Veterinary Therapy VII. W. B. Saunders, Philadelphia 1980, 461-466.
2. Guzguere E, Guaguere-Lucja J. Pathologie tumorale de l'oreille des carnivores domestiques. Pratique Medicale et Chirurgicale de l'Animal de Compagnie 1985;20:87-93.
3. Rogers KS. Tumors of the ear canal. Veterinary Clinics of North America/Small Animal Practice 1988;18:859-868.
4. Masuda A, Sukegawa T, Mizumoto N, Tani H, Miyamoto T, Sasai K *et al.* Study of lipid in the ear canal in canine otitis externa with *Malassezia pachydermatis*. Journal of veterinary medical science 2000; 62(11):1177-82.
5. Angus JC. Otic cytology in health and disease. The Veterinary Clinics of North America. Small Animal Practice 2004;34(2):411-24.
6. Cole LK. Otoscopic evaluation of the ear canal. The Veterinary clinics of North America. Small animal practice 2004; 34(2):397-410.
7. Devaney KO, Boschman CR, Willard SC, Ferlito A, Rinaldo A. Tumours of the external ear and temporal bone. The Lancet Oncology 2005;6(6):411-20.