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## Surgical management of aural hematoma in dogs

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### Abstract

Aural hematomas can be managed medically and surgically. In both the techniques frequent rechecks are necessary for evaluation of the condition. In this study surgical technique was used and the hematoma was drained and pressure bandage was applied. All the dogs recovered uneventfully. In none of the cases recurrence was noticed and all the dogs recovered well after surgery.

**Keywords:** Aural hematoma, pinna, S shaped surgical incision

### Introduction

Aural hematoma is considered as collection of blood within the cartilage plate of the ear. It is considered to be a common condition in dogs and cats characterized as fluctuant swellings filled with hemorrhagic fluid [3]. Causation of aural hematoma is not well understood; but appears to be the result of head shaking or scratching at the ear caused by pain or irritation associated with otitis externa. The exact location of the source of hemorrhage is not known but is thought to come from branches of great auricular arteries and veins within, under, or between the cartilage layers [3]. The present case study reports successful management of aural hematoma using surgical correction by making an S shaped incision on the pinna.

### 2. History and Diagnosis

In the present study twenty four dogs of various breeds and different age groups and of both sex were presented to the hospital with a history of fluid filled fluctuant ear pinna. In all the dogs condition persisted for three to five days. Clinical examination revealed that heart rate, respiratory rate and temperature were within normal range. Physical examination revealed fluid filled, soft, and fluctuant mass on the concave surface of the pinna. On examination the condition is diagnosed as aural hematoma and all the dogs were treated surgically. Preoperative haematology and serum biochemistry parameters were evaluated and are found to be within the normal range.

### 3. Anaesthesia

The dog was premedicated with atrophine sulphate @ 0.04mg/kg subcutaneously and xylazine @ 1mg/kg and ketamine @ 10mg/kg. The anaesthesia was maintained with propofol to affect. Other medications include Ceftriaxone @ 20 mg/kg i.v and pantaprazole @ 1mg/kg.

### 4. Surgical procedure

The dogs were positioned in lateral recumbency such that the affected ear was facing the surgeon. The pinna was prepped aseptic. S shaped incision was made on the concave side and hematoma and its contents were exposed. The hematoma was drained and fibrin clots were removed, if any. Then the cavity is irrigated with NS and then using 2-0 polyamide sutures were placed on the concave surface of the ear without incorporating the skin on the convex surface of the ear. Ample number of sutures were placed such that no pockets are left for fluid accumulation. After surgical correction, pressure bandage was applied (Fig.1) and the owners were advised E collar application. Antibiotics and anti-inflammatories were given for 7 days postoperatively. The dogs were reviewed for every three days until suture removal. All the dogs recovered well without recurrence.

### 5. Discussion

Aural hematoma means accumulation of blood in the ear inside the cartilage and between

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cartilage and skin [5]. It is known that untreated aural hematoma caused marked auricular deformation. Because aural hematomas within the auricular cartilage are not rapidly absorbed but replaced by large amounts of granulation tissue and contracture progresses, early drainage is essential for maintaining appearance and early healing [2,6]. The aim of any operative or conservative technique is to remove the accumulated blood from the pinna and prevent fluid development later on [1,6]. In the present study we report use of surgical drainage of aural hematoma. In this we report minimal postoperative care and no complications. No recurrence has been noticed in any of the dogs.

A frequent complication of aural hematoma is the cauliflower like shrinkage of the auricle [4]. In the present study this complication was avoided by accurate fixation. The auricle layers are attached together in accordance with the original location, thereby preventing deformity of the ear. No fluid accumulation was noticed in any of the dogs after the surgery in the present study. The S shaped incision used in this study does not alter the ear confirmation and was easy to perform. The minimal postoperative care and minimal complication rates made this amenable for correction of aural hematoma.



**Fig 1:** Series of pictures showing fluid filled pinna (left) and after surgery (top right) and pressure bangade was applied after surgery.

## References

1. Brown C. Surgical management of canine aural hematoma. *Lab. Anim. (NY)* 2010; 39:104-105.
2. Dye TL, Teague HD, Ostwald DA Jr, Ferreira SD. Evaluation of a technique using the carbon dioxide laser for the treatment of aural hematomas. *J Am. Anim. Hosp. Assoc.* 2002; 38:385-90.
3. Fossum TW, Hedlund CS, Hulse DA. *Small animal surgery*. 5<sup>th</sup> edn. Elsevier. 2019, 319-324.
4. Harvey RG, Harari J, Delauche AJ. Ear Diseases of the Dog and Cat. *Schweizer Archiv für Tierheilkunde*, 2004; 146(2):95-95.
5. Kuwahara J. Canine and feline aural hematomas: results of treatment with corticosteroids. *J Am. Anim. Hosp. Assoc.* 1986; 22:641-647.
6. Lanz, OI, Wood BC. Surgery of the ear and pinna. *Vet Clin. North Am. Small Anim. Pract.* 2004; 34:567-99.