

## Surgical Management of Aural Haematoma in a Malabari Kid

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### Abstract

A male Malabari kid was presented with history of head shaking and swelling on concave side of left ear pinna. Physical examination revealed fluctuating swelling and slight pain on palpation of ear pinna. The condition was diagnosed as aural haematoma. Under general anaesthesia, surgical drainage was performed to remove the accumulated blood and protective compression bandage was applied and immobilized the ear against dorsum of head and neck. Advised alternate day dressing and routine post-operative antibiotic and analgesic therapy for five days. After ten days, sutures were removed and animal had an uneventful recovery.

**Keywords:** Aural haematoma; kid; incision drainage

### Introduction

Aural haematoma is collection of blood within the cartilage plate of ear characterised as fluctuant, fluid-filled swelling on concave surface of one or both pinna (Fossum *et al.*, 2007). Generally ear haematomas were seen in dogs and cats (Cechner, 1990) and rare in goats. Aural haematomas are the most common physical injury of pinna and they are most apparent on pinna's concave surface. This condition was usually unilateral or may be bilateral also. Aural haematoma results due to constant shaking and rubbing of ear due to otitis, ectoparasitism, otorrhoea, foreign bodies, hypersensitivity and allergic dermatitis which leads to rupture of pinnal blood vessels resulting in haematoma formation (Ahiwar *et al.*, 2007).

The present paper describes surgical management of aural haematoma in a Malabari kid.

### Materials and Methods

A two and half months old male Malabari kid weighing five kilograms was presented with history of head shaking and swelling on concave side of left ear pinna. Physical examination of ear revealed fluctuating swelling and slight pain on palpation of ear pinna (Fig. 1). The condition was diagnosed as aural haematoma and surgical drainage was resorted to.

The animal was anaesthetized using a combination of Ketamine hydrochloride (Zokent<sup>a</sup>) at the rate of 2mg/kg b. wt. and Midazolam (Mezolam<sup>b</sup>) at the rate of 0.2 mg/kg b. wt. intravenously. Meloxicam (Melonex<sup>c</sup>) was given at the rate of 0.5 mg/kg b.wt. intravenously. The area around the site of incision was shaved and prepared aseptically. The kid was placed on surgical table with affected ear up, a linear incision was made on the centre of haematoma at the concave side of ear. The haematoma was drained (Fig. 2) and fibrin deposits on the cartilage was removed using moistened gauze sponge held with mosquito forceps. The haematoma cavity was flushed with saline solution. A series of through and through interrupted mattress sutures using no 2-0 monofilament nylon were placed parallel to the incision line with knots on the concave surface of the ear (Fig. 3). Enough sutures were placed to eliminate dead space between the skin on concave surface and auricular cartilage so that blood could no longer accumulate at haematoma site. A protective compression bandage was applied and immobilized the ear against dorsum of head and neck (Fig. 4). Routine post-operative care was provided for five days with Ceftriaxone (Intacef<sup>c</sup>) at the rate of 20 mg/kg b. wt. intravenously twice a day and Meloxicam (Melonex<sup>c</sup>) at a rate of 0.3 mg/kg b. wt. subcutaneously once a day.

### Results and Discussion

The sutures were removed on 10<sup>th</sup> post-operative day and animal made an uneventful recovery.

If aural haematoma is left untreated, fibrin formation can occur, leading to fibrosis, contraction and

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Fig. 1: Aural hematoma



Fig. 2: Drainage of hematoma



Fig. 3: Mattress sutures in place



Fig. 4: Showing protective bandage

thickening, potentially leaving the ear with a deformed cauliflower-like appearance (Medleau and Hnilica, 2006). If treatment is delayed, surgical intervention may be more difficult and scars will be more likely to form.

Several techniques have been reported in literature for management of aural haematoma. The goals of surgery are to remove the haematoma, prevent recurrence and retain the natural appearance of ear. The most commonly used procedure involves incising the tissue overlying the haematoma, evacuating blood clots and fibrin and holding the cartilage in apposition with sutures until scar tissue can form. Drains or cannulas have been used to provide drainage for several weeks during the healing process. To prevent enlargement or fibrosis, haematomas should be treated soon after they occur. Application of bandage is beneficial for treating aural haematoma because it protect the ear from self-trauma and keeps tissues in apposition (Fossum *et al.*, 2007).

In present case, aural haematoma was noticed in a Malabari kid. Physical examination revealed ectoparasites on different body parts, which may have caused haematoma. The present case was successfully treated surgically by providing incisional drainage. Also, compression bandage was applied

and ear was immobilized against dorsum of head and neck. The animal had an uneventful recovery and no complications were observed.

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