

SURGICAL TREATMENT OF EAR HAEMATOMA IN DOGS

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ABSTRACT

The was conducted on 15 dogs of either sex and of different breed presented at my clinic (canine clinic* during a period of sex months.

Their ages were ranging between 2-3 years. The dogs showing unilateral or bilateral swollen ear that is Haematoma. The surgical treatment was done by making a longitudinal incision on in entire length of haematoma. After draining the blood or serum, cleaning the debris. Haematoma pocket flushed with saline or weak tincture iodine. Horizontal interrupted materess suture placed parallel to the incision, the pinna was dressed with antiseptic then bandaged with compression bandage to keeping the ear in erect position. The suture removed after 9-10 days post operation. Bandaging will continue to 6 more days till the operated ear return to its normal condition.

INTRODUCTION

Aural haematoma in dogs is a common problem particularly in a dogs with floopy pendulous ear like labrador, cookel spanil and basset hound, it was also reported in erect ear dogs like German Shipherd and some breed of Spits (1). Ear haematoma is an accumulation of blood in between skin and cartilage of the ear, it usually appear as fluid filled swelling on the concave surface of Pinna. However the external ear consist of skin covered cartilage, the ocular cartilage and annular cartilage. The ocular cartilage is a single- sheet of elastic cartilage which is thin and pliable at the apex. The skin on the concave (inner) surface of pinna is tightly adherent to the cartilage whereas that on the convex (outer) surface relatively mobile the cranial the caudal border of auricular cartilage is relatively straight whereas the caudal border is curved. The helix is the free margin and adjacent part it is serrated and perforated by numerous foramina which are also found through out the auricular carting. Branches of cranial auricular and the great auricular artery form the blod supply to the pinna. They encircle the margin of the aurical cartilage and pass through the foramina supplying the lateral surface. The venious drainage of the ear broadly fallows the arterial supply (1,2).

Aural haematoma may occur unilaterally with occasional subsequent development of haematoma in the contralateral ear, less commonly present bilaterally (3, 4) it is generally occur on a concave surface or the pinna (5) the predisposing factor to haematoma include trauma to pinna, a history of violent head shaking and acute or chronic otitis externa (6). The other factor may be ear mites, fly bites dermatological diseases (7, 8). Dogs with long and heavy droopy ear are prone to bacterial infection as the droopy ear prevent natural airing and drying of ear canal and it block light and maintaining dark, moist and warm environment suitable for yeast and bacteria growth in addition a foreign body parasites and neoplastic growth may become a source irritant cause ear scratching and make the dog shake its head vigorously to get rid of itch. Thus blood vessels in earflap may rupture and bleed into the tissue of the pinna forming a pocket, but continuous head shaking will cause the pocket to enlarge until it became very noticeable (1,9,10).

For treatment of aural haematoma, there are three approaches, medical (9) surgical (10) and carbon dioxide laser approach (11).

The aim of this study was to evaluate the surgical treatment approach to treat aural haematoma in dogs.

MATERIALS AND METHODS

During a period of six months (between) September to March } 15 dogs of different sex and breed were presented to a private clinic, All the dogs were suffering from swelling on concave surface of uni or bilateral ear. the diagnosing was depending the history, clinical symptoms and physical examination

For surgical treatment the dog was premeditated with 0.02mg/kg BW atropine sulphate I/M {12}. Fifteen minute later general anesthesia was induced by administration of Xylazine Hydrochloride {interchemo Holland} at dose rate 15mg/Kg BW I/M and Ketamine HCl {Holdn} at dosage rate of 15mg/Kg BW I/M {13}. And when the dog attend surgical stage of anesthesia kept on lateral recumbence with affected ear upward ear canal was packed with cotton, After clipping and shaving the hair, the pinna cleaned and disinfected with surgical spirit {70% alcohol} longitudinal incision on the skin of ventral surface of the pinna was made to include entire length of haematoma, the incision was made under complete aseptic technique. Then drainage of the accumulated blood or serum. The debris was removed and the cavity flushed with normal saline) and followed by placing of several rows of horizontal interrupted mattress suture parallel to the incision line and on both sides to cover entire pinna giving the knots on concave surface. However while tightening the knot a uniform pressure were maintained on the suture with help of thumb in order to make the suture

sufficiently tied and the skin at this point straight with no wrinkle formation. Then after the operated ear cleaned and dressed with antiseptic{spirit} and was Bandaged, For bandaging the operated ear two piece of card board were prepared in the shape and size of pinna. The inner one was lesser by 1-2cm. from the ear edge. The cards board pieces were first warbled with cotton and cotton bandage and were placed one piece on each side of operated ear pinna now the operated ear in between the pieces were warbled together with the comparative cotton bandage taking the support of opposite ear .Then layers of adhesive tape was placed in order to keep the ear in erected position as in [figure 1). The bandage was changes whenever it is necessary and suture were removed on 9-10 days post operation as in (figure 2). After that bandaging continued for -6 more days until the ear return to its normal condition.¹

RESULTS AND DISCUSSION

Surgical treatment of ear haematoma was proved more successful and all the operated ear were rapidly healed and return to there normal condition within 2 weeks as in figure (2) and completely recovered with normal hair after 6 weeks as in figure (3). There were no incidence of of hamatoma recurrence noticed and all the ear well erected comparing with untreated cases which mentioned by (1) as said that untreated cases was associated with scaring bluish and deformity. In addition to that other worker like 1,2, 4 and 10 a said that the large untreated haematoma needed longer time for healing. However by placing several rows of horizontal materess suture parallel to the incision and on both side to cover enteric pinna could help in reducing the pocket and to bring of the two separated layer of pinna together. While the competitive bandage along with card board Pisces could prevent re accumulation of serum and blood. In haematoma pocket, in addition it also acted as a guard to protect the ear from scratching with clews which may cause farther damage, adhesive tape could help in keeping ear erected and facilitate proper drainage and to prevent head shaking which may disrupt suture line(1) there for healing take place. The thickening of ear pinna post operatively could be reduced by applying and applying an anti- inflammatory ointment that is inflamine which reduce irritant and inflammatory swollen However with this procedure of treatment the prognosis is good and rapid this finding coincide with (1-10) as they said that surgical treatment of Aral haematoma was rapid and usually require 2-3 weeks

¹ *Canine clinic (private clinic) robra complex narmada road M.P. India.

**Inflamine an arvadaic ointment /Indian herbs

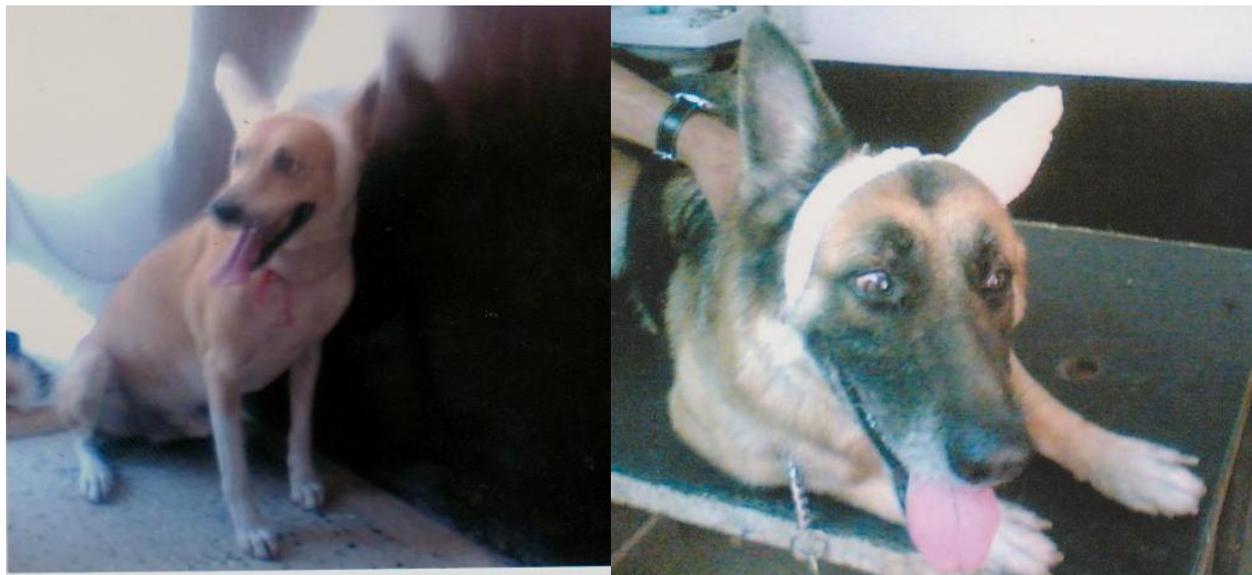


Figure (1): this shows operated ear bandaging with cotton bandage and adhesive tape immediately after operation



Figure (2): This figure shows the operated ear after 2 weeks



Figure (3): shows the operative ear after 6 week

العلاجات الجراحية لورم الأذن الدموي في الكلاب

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الخلاصة

خلال فترة ستة اشهر اعتبارا من آذار إلى أيلول احضر خمسة عشر كلبا من كلا الجنسين ومن فصائل مختلفة إلى (عيادة الكلاب السريرية) وكانت بأعمار مختلفة تتراوح ما بين 2-3 سنوات جميع الكلاب كانت تعاني من ورم إذني دموي إما أحادي أو ثنائي. عُجِلت جميعها بواسطة عمل جرح طولي على الجلد المغطي للورمة الدموية وبعد سحب الدم ومصل البلازما المتجمع وتنظيف الخثره تم تنظيف المكان مباشرة بمحلول ملحي او محلول ضعيف من صبغة الايوداين وضعت عدة صفوف من الخياطة المتقطعة بموازاة الجرح المعمول ولكلا جانبي الجرح لتغطي صيوان الإذن بأكمله وبعد وضع المراهن المضادة للالتهابات ضد الجرح بمساعدة قطع من الكارتون المقوى المعمولة بشكل الإذن وشدة بوضع الوقوف. ازيلت الخيوط في اليوم التاسع والعاشر من العملية واستمر التضميد إلى ستة أيام أخرى لوحظ عودة الإذن إلى حالتها الطبيعية بعد ست أسابيع من العملية

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