

Treatment Outcomes of Auricular Seroma using buttons: A Pilot Study

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Background: Hematoma of auricle is a collection of blood beneath the perichondrial layer of pinna usually posing a challenge to an ENT surgeon due to its high rate of recurrence after treatment and lack of appropriate material for use as stitch dressing. This is a pilot study in which shirt buttons were used as a stitch dressing after routine incision and aspiration.

Aim: To determine the effectiveness of buttons in the treatment of auricular seroma/hematoma.

Materials and Methods: 20 patients of recurrent auricular seroma/hematoma presenting at OPD, SMS hospital, Jaipur, underwent aspiration and button suturing and were taken up for the study.

Results: All patients underwent aspiration and button suturing, had uneventful recovery and were followed up for 1-3 months.

Conclusion: Buttons which are readily available have been found very helpful as stitch dressing in the management of auricular seroma/hematoma.

Keywords: auricle, hematoma, seroma, buttons, stitch dressing.

I. Introduction

Seroma/hematoma of the auricle is a condition in which blood collects beneath the perichondrial layer of pinna. It usually arises as a result of trauma or could be spontaneous. It can also occur in hypertensive patients due to degenerative changes in fibrous wall of blood vessels.

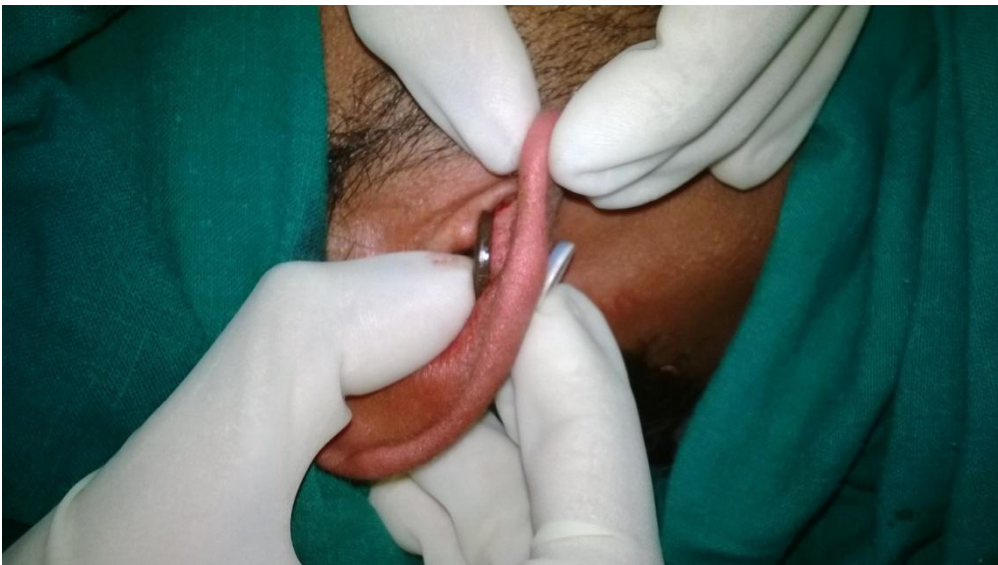
Seromas/hematomas of the ear are caused by shearing forces of blunt trauma, such as seen in sports of boxing and wrestling. Shearing forces causes separation of perichondrium from the auricular cartilage, tearing the blood vessels and causing blood to accumulate between densely adherent skin-perichondrial layer and cartilage. The challenge it poses is because of its high rate of recurrence and lack of appropriate materials for use as stitch dressing.

Diagnosis is usually straight forward, i.e. loss of normal contour due to collected blood or serum, along with hearing loss or temporal bone fracture depending upon type and severity of injury.

The aim of our study is to describe the surgical technique used in treating auricular seroma/hematoma as well as to introduce an easy to use and readily available material as stitch dressing.

II. Materials and Method

This is a prospective study done at SMS hospital, Jaipur. All 20 patients had undergone one or more surgery as incision and aspiration before presenting at OPD at SMS Jaipur and thus were planned for aspiration and button suturing. During surgery, a curvilinear incision was made along the lateral border of anti-helix, skin flaps raised, complete evacuation of the fluid done, subsequently 2 buttons were placed, one on each side of pinna, with pinna being effectively sandwiched between the 2 buttons which were then sutured. Stitch dressing removed in 7 days without complications. Patients were then followed up for a period of 1-3 months without any complications.





III. Discussion

Auricular seromas are caused by a disruption of a blood vessel between the auricular cartilage and the perichondrium. These lesions occur in the upper anterior part of the auricle (mostly in the scaphoid fossa), and blood is encountered when the lesion is aspirated. Usually the swelling is associated with a history of trauma. On examination, these swellings are usually tender and fluctuant, and the overlying skin is erythematous.¹

Although a definitive diagnosis cannot be made without aspiration of the cyst, many physicians advocate observation in the hope of spontaneous resolution. Others argue that aspiration or incision and drainage will shorten the disease period and allow for the fluid to be sent for pathologic evaluation.²

If not treated properly, seromas could lead to-

1. Abscess formation
2. Chronic scarring
3. Auricular disfigurement
4. Cauliflower ear
5. Fibro-cartilaginous development

Proper management is aimed at restoring normal appearance of the auricle and it could be only achieved if perichondritis and re-accumulation of seroma/hematoma is avoided.

The treatments of this condition are removal of the cystic content (either aspiration or incision) and followed with induction of fibrosis (scarring) of intracartilagenous cavity and/or bilateral pressure dressing (anterior and posterior surface).³

O'Donnell and Eliezri suggest excising a disc of cartilage and perichondrium to cure recurrent seromas. Placement of a continuous portable suction drain that remains at the incision site is a treatment option that has been advocated.⁴

Patigaroo et al used the commonly used technique of simple aspiration followed by intralesional steroid injection followed by pressure dressing. But intralesional steroid administration has some disadvantages such as skin pigmentation changes, skin, soft tissue and cartilage atrophy.⁵

Needle aspiration though still widely used, usually results in re-accumulation. Treatment involves use of one or two sutures with pledgits to allow for chronic drainage. The goals of treatment are therefore evacuation of seroma/hematoma, preventing re-accumulation and avoidance of complications. Several other materials like silicon splints/ plaster molds can be used, but they are not locally available and can cause tissue reaction if not recurrence.

Material used in this study i.e. buttons, caused no tissue reaction, along with the fact that they are readily and locally available and easily affordable make it an ideal substitute.

IV. Conclusion

In the management of auricular seroma/hematoma, it was noted that finding an adequate material for use as stitch dressing is a challenge, as incision and aspiration on its own is ineffective. Buttons were suggested because they are readily available and results from this pilot study have been found to be encouraging.

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