Bolsterless Management of Primary and Recurrent Auricular Hematoma

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ABSTRACT

Etiology

<table>
<thead>
<tr>
<th>Etiology</th>
<th>N (%)</th>
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<tbody>
<tr>
<td>Assault</td>
<td>5 (17.8)</td>
</tr>
<tr>
<td>Mixed Martial Arts</td>
<td>15 (53.6)</td>
</tr>
<tr>
<td>Self-harm (MRCP)</td>
<td>8 (28.6)</td>
</tr>
<tr>
<td>Wrestling</td>
<td>13 (46.4)</td>
</tr>
<tr>
<td>Female</td>
<td>6 (21.4)</td>
</tr>
<tr>
<td>Male</td>
<td>22 (78.6)</td>
</tr>
<tr>
<td>Primary</td>
<td>15 (53.6)</td>
</tr>
<tr>
<td>Recurrent</td>
<td>13 (46.4)</td>
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</tbody>
</table>

INTRODUCTION

Auricular hematoma is most often caused by blunt force trauma to the pinna.

Left untreated, cosmetic deformity results from infection, fibrosis, and neocartilage formation (cauliflower ear).

Numerous techniques have been described over the years for the management of auricular hematoma. Most include the use of a compressive bolster (dental roll, thermoplastic, button, etc.) following incision and drainage.

The bolsterless technique using absorbable mattress sutures has been reported in the past, but has not found widespread acceptance.

We report our experience with 28 patients, the largest series to date, using the bolsterless technique to treat both primary and recurrent auricular hematoma.

We describe the comparative benefits of the bolsterless technique both in terms of initial patient care as well as cosmetic outcomes.

METHODS AND MATERIALS

Patients presented with initial or recurrent auricular hematoma following traditional treatment with incision and drainage and bolster placement.

Procedures were performed in the office or ER procedure room. The ear was prepped and draped steriley and local anesthesia was achieved with lidocaine injection.

Incision and drainage was performed first. A 15 blade was used to make an incision in a cosmetically favorable crease of the pinna. A hematostat was used to fully evacuate the hematoma, and the wound was copiously irrigated with saline.

The auricular skin overlying the hematoma was then stabilized with through and through absorbable horizontal mattress sutures using 4.0 or 5.0 plain or fast absorbing gut sutures. The number of sutures employed was determined on a case by case basis in order to achieve complete apposition of perichondrium to cartilage (to effectively close the dead space).

Antibiotic ointment was applied to the incision and a loose ear dressing was applied for patient comfort. Oral antibiotics (most commonly cephalaxin) were prescribed to cover skin pathogens.

Patients were seen in follow-up to evaluate for recurrence and assess cosmetic results.

RESULTS

28 patients were treated for auricular hematoma using the bolsterless technique over a 12 year period. There were no recurrences in follow-up and cosmetic results were judged to be excellent by both patient or guardian and surgeon.

CONCLUSIONS

Bolsterless management of auricular hematoma using absorbable mattress sutures is effective in both primary and recurrent cases.

The success rate and cosmetic outcomes of this technique compare favorably to techniques that employ a bolster.

The bolsterless technique is well tolerated by patients and allows for early return to activity with no need for the care or dressing involved in a standard bolster technique.

REFERENCES