Auricular Seroma: Our Technique

Priyadarshini Govindarajalu, Ayisha Kunnumal

ABSTRACT

Introduction: Pseudocyst or seroma is an uncommon asymptomatic, non-inflammatory swelling of the pinna, characterized by endochondral cyst formation. Various treatments are available such as needle aspiration, curettage following incision and drainage and subsequent contour pressure dressing, deroofing procedure or insertion of a small drainage tube into the pseudocyst with a guide needle. The purpose of this study was to develop a new technique for the treatment of auricular seroma.

Materials and methods: In this study 43 patients with seroma of auricle who presented to ENT OPD of AVMC and were treated during the period between August 2015 to August 2018 were included. All cases of seroma auricle were managed with the technique of primary drainage and suturing. Consent was obtained explaining the possibility of change in shape. Sutures were removed on the 10th day. All patients were called for follow-up at 1 month.

Results: In our study male to female ratio was 2:1. The common age group was found to be 20–40 years with a total of 28 patients. Sixty-three percent presented with seroma in the right auricle and 37% of patients presented with left ear seroma. Majority of the patients, that is, 75% had no known cause for developing the seroma. Seroma completely disappeared without disfigurement in all patients.

Conclusion: Auricular seroma was noted to completely disappear without disfigurement with incision and drainage of fluid with pressure suturing. Our technique is an office procedure and can be carried out under local anesthesia with promising results.

Keywords: Auricular seroma, Pinna, Suturing

INTRODUCTION

Pseudocyst or seroma is an uncommon asymptomatic, non-inflammatory swelling of the pinna, characterized by endochondral cyst formation. Repeated minor trauma has long been suspected to have some part in the pathogenesis of auricular pseudocyst. This includes sleeping on hard pillows, carrying large weights on the shoulder. As the etiology is obscure, various treatments are followed such as needle aspiration, curettage following incision and drainage and subsequent contour pressure dressing, deroofing procedure or insertion of a small drainage tube into the pseudocyst with a guide needle.

The purpose of this study was to develop a new technique for the treatment of auricular seroma.

MATERIALS AND METHODS

In this study, 43 patients with seroma of auricle who presented to ENT OPD of AVMC and were treated during the period between August 2015 to August 2018 were included.

All cases of seroma auricle were managed with the technique of primary drainage and suturing. Consent was obtained explaining the possibility of change in shape. Under all aseptic precautions, the seroma was drained by giving an incision on the summit of it. All fluid was drained and the cavity was washed with beta-dine. Through and through sutures were taken using 5-0 prolene (Fig. 1). Betadine dressing was done and the patient was put on the adequate antibiotic cover and followed up on the 3rd day and 10th day. Sutures were removed on the 10th day (Fig. 2). All patients were called for follow-up at 1 month.

RESULTS

Out of the 43 patients, 29 were males (67%) and 14 (33%) were females. Male-to-female ratio was 2:1 (Graph 1).

REFERENCE

The most common age group was found to be 20–40 years with a total of 28 patients (65%). The least common was 10–20 years with 2 patients (4%) and 13 patients (30%) in the age group of 40–50 years. The youngest patient was 17 years, and the oldest was 49 years (Table 1).

**Laterality of Seroma**

Twenty-seven patients (63%) presented with seroma in the right auricle and 16 patients (37%) presented with left ear seroma. None of the patients had a bilateral auricular seroma (Graph 2).

**Etiology of Seroma**

Out of 43 patients majority, that is, 32 patients (75%) had no known cause for developing the seroma. Seven patients (16%) gave a history of blunt trauma to the ear, and 4 patients (9%) gave a history of other trauma for example slap over the ear (Table 2).

**Complications**

Of the 43 patients, 10 patients had previously undergone aspiration, but they presented with recollection. Mild deformation of the pinna was noted in 9 out of 10 patients who had undergone prior aspiration.

All patients were reviewed on the 3rd day and 7th day. Sutures were removed on the 10th day.

None of the patients developed recollection, swelling, fever or pain. In all patients seroma completely disappeared without disfigurement.

**DISCUSSION**

In our study commonest age group presenting with seroma was found to be 20–40 years with a total of 28 patients. In a study by Bhat et al., majority of the patients were in the age group between 41 years and 50 years. Malgonde et al. reported a mean age of 23.9 years. Juboori et al. reported mean age with a standard deviation of 29 years ± 2.4 years.

In our study, 67% were males 33% were females. Male to female ratio was 2:1. In a similar study by Bhat et al. they reported 18 males and 12 females. Hansen et al. in their studies on seromas found them only in males. In a study by Malgonde et al., 18 patients were males, and 2

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**Table 1: Age distribution**

<table>
<thead>
<tr>
<th>Age</th>
<th>No. of patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10–20</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>20–30</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>30–40</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>40–50</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>50–60</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

**Table 2: Etiology of seroma**

<table>
<thead>
<tr>
<th>Etiology</th>
<th>No. of patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blunt trauma</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Other trauma e.g. slap over ear</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Minor repeated trauma</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sleeping on hard pillow</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Carrying large weight on shoulders</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>None of the above</td>
<td>32</td>
<td>75</td>
</tr>
</tbody>
</table>

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**Graph 1: Gender distribution**

- Female (33%)
- Male (67%)

**Graph 2: Laterality of seroma**

- Right auricle 27 (63%)
- Left auricle 16 (37%)
patients were females. Juboori et al. 5 84% were male, and 16% of patients were female.

In our study, 63% of patients presented with seroma in the right auricle and 37% of patients presented with left ear seroma. Malgonde et al. 4 reported 13 patients with right ear seroma and 7 patients with left ear seroma.

In our study, 75% patients had no known cause for developing the seroma. Sixteen of the patients gave a history of blunt trauma to the ear, and 9% of patients gave a history of other trauma. Kikura et al. 7 analyzed 16 cases of auricular seroma and found that they occurred in patients without any history of trauma, insect bites, or bruising. Juboori et al. 5 reported that personal insult on the pinna happened in 40% of patients. Sports injuries from football and boxing occurred in 28% of patients, while road traffic accidents and occupational hazards had been recorded.

CONCLUSION
Auricular seroma was noted to completely disappear without disfigurement with incision and drainage of fluid with pressure suturing. Our technique is an office procedure and can be carried out under local anesthesia with promising results.

REFERENCES