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TREATMENT OF AURICULAR SEROMAS WITH THE HELP OF BUTTON

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ABSTRACT

Introduction: Seromas of pinna is a common condition which is routinely observed in ENT practice. The involvement is usually seen in scaphoid, triangular fossa, and antihelix. Medical treatment is ineffective. Various treatments are suggested in the literature. The aims of the paper were to study the clinical characteristic of patients with Seromas and to share our experience with Aspiration and buttoning as a definitive treatment.

Materials and Methods: 186 patients were diagnosed with Seromas of the auricle between October 2016 and June 2018 in Krishna medical college and hospital. Clinical characteristics were noted. All patients underwent aspectic aspiration
followed by buttoning for 8 days.

Results and Observations: Out of 186 patients, only 66 were females. Involvement of right side was seen more than left one. None had bilateral involvement. Adults in the age group of 31-40 were commonly affected. Most common site of involvement was scaphoid and triangular fossa. The success rate with primary aspiration and buttoning was 98.92%.

Conclusions: Seromas of the pinna is a benign condition of unknown etiology affecting the pinna, commonly encountered in middle-aged men and female. Many modalities of treatment have been recommended in the literature with varied recurrence and failure rates. The best form of treatment with minimum recurrence is aspetic aspiration with buttoning.

KEYWORDS

Buttoning, pinna, Seromas,

INTRODUCTION

The pinna contributes enormously to the facial aesthesis. Lesions affecting the pinna can lead to overt disfigurement and change the entire appeal of the face. Auricular seroma, also known as Seromas of the pinna, is an asymptomatic condition of unknown etiology affecting the pinna, commonly encountered in middle-age men. Most reports of auricular seroma have involved Chinese or white patients; however, people of all racial groups have been affected. It was first reported by Hartmann in 18461 and first described in the English literature in 1966 by Engel.2 This is common disorder results from spontaneous accumulation of a sterile, oily yellowish fluid, resembling olive oil. It mostly presents clinically as a solitary, fluctuant, non-inflammatory swelling of the upper portion of the auricle with normal overlying skin.3 Histopathology reveals an intra cartilaginous accumulation of fluid without an epithelial lining. The lack of epithelial lining led to the term Seromas.[3]

The differential diagnoses of the auricular seroma are chondrodermatitis chronic helices, relapsing polychondritis, and sub perichondrial hematoma. Normal overlying skin and painless swelling easily differentiate the seroma from these conditions. 2,4,5 Prevention is practically impossible as etiology is unknown. However, early recognition and treatment are stressed.4 Successful treatment of Seromas remains a challenge because this disease has a high propensity for recurrence.

Numerous therapeutic approaches have been employed in the past with variable success. They are needle aspiration with compression dressing; incision and drainage; intra-cavitary steroid injection, and window (deroofing) procedure.4 Surgical procedures lead to disfigurement of the pinna. The widely used materials for pressure dressing are cotton, gauze, and button bolsters with variable results of recurrence. 3,4 We used a button for the pressure dressing. Button is inexpensive, readily available, and easy to use and has excellent stabilization.

We treated our patients with needle aspiration and pressure dressing with a Botton that took the contour of the pinna. This resulted in complete resolution of the swelling with no disfigurement or recurrence.

MATERIALS AND METHODS

This prospective study was done in the Department of ENT and Head and Neck Surgery, of Krishna Institute of Medical Science And Hospital , Karad.

186 patients who were diagnosed with auricular seroma between October 2016 and June 2018 in Krishna Institute of Medical Science and hospital , Karad were included in the study.

Inclusion Criteria

Patient of auricular seroma visiting the Ear, Nose, and Throat Outpatient

Exclusion Criteria

Any coexistent disease of the pinna, ie, hematoma, skin disease, congenital anomaly, perichondritis, etc Any coexistent disease of the external ear or middle ear and perichondrial abscess Patient education plays an important role before and after treatment. The disease and the treatment were explained to the patient. The etiological factor was noted. The patient was informed that even with optimal therapy, recurrence can occur. Taking strict aseptic precautions under local anesthesia , the seromas was aspirated completely with a No. 20G needle , tight compression with appropriate sized button sutured with 3-0 ethilone through cartilage . Numbers and size of button should be in proportion to affected area, If area of seromas is bigger then we need to use more number of buttons . After buttoning mastoid dressing was applied with gauze and roller bandage, encircling the forehead .

The bandage were removed after 72 hours (ie, on the third day) then button removed after 8 day. During this time, the patient was kept on oral antibiotics and anti-inflammatory drugs. Patients were educated to avoid trauma or soakage of the dressing. Patients were instructed to report immediately if they experienced excessive pain or fever. The patients were examined for any discoloration of the pinna, thickening, or signs of perichondritis. After removal of the Button, the patients were followed up on days 10, and 20 and then monthly for 6 months.

RESULTS

All 186 patients were 120 male and 66 female with a mean age of 32.6 years. 104 (55.91%) patients had a right-sided lesion, whereas 82 (44.09%) patients had a left-sided lesion. No case of bilateral seromas was seen.

In 121 patients (65.05%), seroma was located in the Triangular+

scaphoid fossa and 16 patients (15.59%) seromas was located in Concha. The significant etiological factor was not noted in other patients. After aspiration and Buttoning done, in 184 (98.92%) patients, complete resolution of the swelling was seen in 3 days .In 2 (1.07%) patients, refilling of the cyst was seen immediately after removal of button on day 3. In all of these patients, reaspiration and re-buttoning done and bandage were done and it was kept for another 3 days. No recurrence was seen thereafter.

Temporary thickening of the pinna was seen in 2 (1.07%) patients, but there were no signs of impending perichondritis. It resolved in a few days. Minimal discoloration of the pinna was seen in 3 (1.61%) patients immediately after removal of the button, but it gradually resolved in 3 to 4 days. Not a single patient had a major complication like perichondritis.

AGE DISTRIBUTION

AGE WISE	N0. OF CASES	PERCENTAGE
<10yr	-	
11-20 yr	6	3.22%
21-30 yr	18	9.67%
31-40 yr	107	57.52%
41 – 50 Yr	44	23.65%
51-60 Yr	11	5.92%
Total	186	100%

GENDER DISTRIBUTION

Gender wise Distribution	No. of Cases	Percentage
Male	120	64.51%
Female	66	35.49%
Total	186	100%

LATERALITY OF SEROMAS

Side Involved in Seromas	No. of Cases	Percentage
Right	104	55.91%
Left	82	44.09%
Total	186	100%

SITE INVOLVEMENT

Site Involved	No. of Cases	Percentage
Triangular Fossa+ Scaphoid Fossa	121	65.05%
Concha	16	8.60%
Triangular Fossa	29	15.59%
Scaphoid Fossa	14	7.52%
Diffuse Swelling	6	3.22%
Total	186	100%

Characteristics of pseudocyst pinna

Characteristics	Number of patients
Color of fluid	
Serosanguinous	22
Straw serum	164
Yellow	0

DISCUSSION

The first report of Seromas of pinna was by Hartmann,[5] who described 12 cases of intracartilaginous cyst-like swelling of the pinna. Hansen[6] reported a similar series of six cases in otherwise healthy Caucasian males and labeled them as intracartilaginous cysts but agreed that the term Seromas is more appropriate.

Seromas of the auricle occurs more commonly in Chinese and White men.[1] Although our cases were not histologically confirmed, they shared all the characteristics of Seromas. We found Seromas predominately in males as compare as females. Engel[1] and Hansen[6] found them only in males. Lim et al.[7] reported the incidence as 87% in males. A review by Cohen and Grossman[8] stated that Seromas occurred predominantly in men. Shanmugham[9] and Ramadass and Ayyaswamy[2] reported two cases in females. Young children are rarely affected as seen in our study.

Majority of the Seromas were involving scaphoid fossa, triangular fossa, and antihelix followed by concha. Engel[1] and Cohen and Grossman[8] also cited the scaphoid fossa and triangular fossa of the antihelix as the main sites of predilection while Supiyaphun and Decha[3] in contrast noted concha as the most common site of predilection. Seromas usually present unilaterally, but there are reports of bilateral presentation.[8]

Seromas occur more commonly on the right side as reported by many authors[8] but we also found them more on the right side. We did not find any bilateral involvement, but the fact is that bilateral lesions are found in only 13% of the patients and are mainly reported in the pediatric age group.[3]

Typically the serosanguineous and serous fluid is seen in the Seromas. The volume of the aspirates was reported to have a range between 0.5 and 10 mL[6,8] and we found it between 1 and 4 mL. Typically, the swelling develops in 4-12 weeks.[2] The size ranged from 1 to 5 cm in diameter[2] and we found it between 1.5 and 4.5 cm.

The ultimate aim of treatment is successful drainage of the Seromas without damage to healthy cartilage and to prevent its recurrence. The treatment of this condition varies in the literature because of the inherent recurrence. Different forms of treatment have been described in several case reports and small series to overcome the recurrence: Simple observation for 3 months;[12] simple aspiration followed by pressure dressing applied on the pinna for 2 weeks;[2] aspiration of fluid followed by injection of various substances such as steroids, 50% trichloroacetic acid, and triamcinolone;[13] oral corticosteroids alone;[13] incision and drainage with curettage and pressure dressing;[13] needle aspiration plus bolstered pressure sutures applied over both aspects of the cyst;[3] surgical curettage and fibrin sealant has been shown to be effective in obliterating the cystic cavity;[13] treatment by incisional biopsy;[4] resection of the anterior cartilaginous leaflet of the Seromas with repositioning of the overlying skin flap or the so-called deroofi ng technique followed by buttoning.[14] Simple punch biopsy followed by the application of a bolster for approximately 2 weeks;[15] CU-VAC technique;[3] drainage tube inserted into the Seromas using a guide needle;[16] a piece of cartilage removed posteriorly and corrugated drain kept in place;[17] intralesional injections of minocycline hydrochloride (1 mg/mL) two to three times at 2-week intervals have shown effi cacy.[18]

In our study most effective technique for Seromas is aseptic aspiration and buttoning the so-called surgical buttoning technique. The success rate in our study with this procedure was 98.92% and recurrence was seen in only 2 patient. This procedure has been found to be the best approach in many studies. Lim et al. in their series found that none of the patients had recurrence following excision and compression buttoning of the Seromas. Choi et al.[11] performed this procedure and the majority of cases they treated by this procedure was successful. Harder and Zachary[19] in their series found a normal-appearing auricle with minimal scarring or recurrence. Perichondrial reaction and thickening of pinna were the common complications which we noticed. Perichondrial reaction subsided with antibiotics and anti-infl ammatory drugs. Proper surgical and postoperative care of the wound can minimize if not prevent most of the complications and hence this procedure can be recommended for treating auricular Seromas.

CONCLUSION

Seromas of the pinna is a painless benign condition commonly encountered in middle-aged persons. It occurs commonly, unilaterally, and in males as campared to female. Despite its unclear etiology, chronic low-grade trauma is one of the etiological factors in its development. Many modalities of treatment have been recommended in the literature with varied recurrence and failure rates. Considering the rate of success, we would like to advocate aseptic aspiration and buttoning (button procedure) as being the best method that can be undertaken in the management of auricular Seromas.

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