

**Original Research Paper** 

# A Study on Outcome of Pressure Dressing with Drain in Management of Pseudocyst of Pinna

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anterior aspect of auricle	benign condition of the ear that is caused by intracartilagenous collection of serous fluid in the Different treatment modalities are described in the literature for the management of pseudocyst	

Pseudocyst of pinna is a benign condition of the ear that is caused by intracartilagenous collection of serous fluid in the anterior aspect of auricle. Different treatment modalities are described in the literature for the management of pseudocyst of pinna. Here we share outcome of management of pseudocyst of pinna by pressure dressing with drain in a tertiary care centre. Analysis of data of the follow up on 2nd week, after 1 month and after 3 month for occurrence of recurrence, infection and perichondrial thickening was done. No recurrence was noted. As per our experience this is a safe, simple and effective method as compared to other methods mentioned in literature.

**KEYWORDS** 

Pseudocyst, Pressure bandage, No 16 IV canula

# INTRODUCTION

A pseudocyst of auricle is a benign cystic swelling resulting from intracartilagenous accumulation of fluid. The condition was first described by Engel [1]. Typically involved sites are scaphoid fossa, triangular fossa of the antihelix, and the cymbaconcha[2].Males are commonly affected. Mean age of presentation is 35-40 yrs.Usually occur unilaterally[3].Condition is usually asymptomatic. Etiology of condition is unknown but some believe that repeated minor injuries may be responsible. Cyst contain viscous straw-yellow fluid while sometimes contain a clear pale yellow fluid [3].Diagnosis is based on clinical examination. An ideal treatment modality is one that should preserve anatomical architecture of pinna and free of recurrence. Medical treatment is ineffective. Various surgical methods mentioned in literature are incisional drainage followed by chemical obliteration with intracartilagenous trochloroacetic acid [4] and intralesional corticosteroid [5, 6] or mechanical obliteration by pressure dressing with button blosters or compression suture therapy. Other methods mentioned in literature are posterior cartilage window technique, aspiration and quilting technique [7] and deroofing technique [8]

# MATERIALS AND METHODS

Study design: Retrospective study.

Study setting: Dept of ENT in a tertiary care centre.

**Study subject:** Patients visited ENT OPD of a tertiary care centre between June 2014 to February 2015 who diagnosed to have pseudocyst of pinna and underwent below mentioned procedure.

Pinna was cleaned with betadine solution and draped. Small holes created at the tip of a no 16[green] IV canula.Pseudocyst pierced with IV caula in most dependent part and needle removed[Fig 1]. Minimal pressure applied over the cyst to assist drainage of fluid. After the entire fluid drained out and cyst collapsed the canula cut shortened and kept as a drain[Fig 2] and pressure bandage applied.Antibiotics given for 10 days and anti-inflammatory drugs given for 5 days. Pressure bandage removed on 5th day for checking any accumulation and re applied. Again pressure bandage and drain removed on 10 th day.









## Sample size: 20 patients

**Inclusion criteria:** Patients were diagnosed to have pseudocyst of pinna based on history, clinical presentation, appearance of fluid, no evidence of infection and absent signs of inflammation were included in the study.

**Exclusion criteria:** Cases with evidence of infection, inflammation and with history of trauma to pinna were excluded from study

**Procedure :** Analysis of data of the follow up on 2nd week, after 1 month and after 3 month for occurrence of recurrence, infection and perichondrial thickening.

**Data analysis:** Percentage of patients who developed recurrence, infection and perichondrial thickening calculated.

## RESULTS

Total number of patients enrolled in this study was 20. 12 were males and 8 were females[Table no 1].Maximum number of patients were in the age group of 31-40 years[8 no].Involvement was seen on both side but was more on right side than left side with 14 and 6 respectively[Table no 1 & 2].No bilateral case was seen.

Maximum number of patients had swelling involving antihelix [12 no],6 and 2 over scaphoid fossa and triangular fossa respectively[Table no 2]

Reaccumulation of fluid was seen in one patient on  $5^{th}$  day due do displacement of drain. Drain reapplied and no collection was seen on  $10^{th}$  day. Two patients developed minimal thickening of perichondrium on  $10^{th}$  day, but it was resolved on  $2^{nd}$  week. No other complications like perichondritis or development of cauliflower ear seen.

## Table no 1

#### Age group of patients and side involved [n=20]

Age Group[In years]	Male	e Female	Side involved	
years]			Right	Left
1-10	0	0	-	-
11-20	0	0	-	-
21-30	4	2	5	1
31-40	5	3	5	3
41-50	3	3	4	2

#### Table no 2 Site and side involved [n=20]

Site	Right	Left
Antihelix	9	3
Scaphoid fossa	4	2
Triangular fossa	1	1

#### DISCUSSION

Pseudocyst of the auricle occurs more commonly in Chinese and White men [1].Hartman was first to describe pseudocyst of pinna [9].In our study pseudocyst was seen predominantly in males. Engel [1] and Hansen [10] found them only in males. Cohen and Grossman [11] and Lim et al [12] found them predominantly in males.

We did not found any children affected with pseudocyst of auricle. Yougest patient in our study group was 21 yrs. Supiyaphun P et al[13] found that young children are rarely affected with pseudocyst of auricle.

Majority of pseudocys in our study was over antiheiix -12, follwed by scaphoid fossa-6 and triangular fossa-2.Engel [1] and Cohen and Grossman [11] found scaphoid fossa and triangular fossa are more common site while Supiyaphun and Decha [13] found concha as most common site. We didn't found any bilateral case. But one female patient presented with pseudocyst on opposite pinnna weeks after first one cured. In our study majority of pseudocyst found of right side-14.

We didn't found any recurrence in our series. One patient who developed collection on 5<sup>th</sup> day due to displacement of drain. No frank perichondritis encountered in our study. Two patients developed minimal thickening of perichondrium on 10<sup>th</sup> day, but it was resolved on 2<sup>nd</sup> week

#### CONCLUSION

Management of pseudocyst of pinna is still a challenge to ENT physicians. Many modalities are recommended in literature with varied success and failure rates. Pressure bandage with drain is a safe, effective, and easy method and got comparable result with any other best methods available in the literature.

#### DISCLOSURE

[a] Competing interests/interests of conflicts-Nil

- [b] Sponsorships-None
- [c] Funding-None
- [d] Written consent of patient-Not applicable
- [e] Animal rights-Not applicable

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