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POSTERIOR CARTILAGE WINDOW TECHNIQUE FOR PSEUDOCYST PINNA: A SAFE & RECURRANCE FREE APPROACH.

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ABSTRACT **OBJECTIVE:** To know the efficacy of posterior cartilage window technique for treatment of pseudocyst of pinna. **METHOD:** A prospective study was done over a period of 7 years where 38 patients were treated by posterior cartilage window technique and results were observed. **RESULTS:** All the patients were successfully treated by this technique without any recurrence & complications. **CONCLUSION:** posterior cartilage window technique is a safe recurrence free treatment modality for pseudocyst pinna.

KEYWORDS : pseudocyst pinna, posterior cartilage window technique

INTRODUCTION

Pseudocyst pinna which is infrequently encountered in routine ENT practice is a benign noninflamatory painless swelling seen commonly in scaphoid and triangular fossa.[1] **{fig-1}**

The etiology of pseudocyst pinna is still not clearly understood but several mechanisms of pathogenesis have been proposed including lowgrade `trauma and spontaneous development.[2] It has been suggested that defect in auricular embryogenesis which leads to the development of tissue planes within the cartilage. These tissue planes open up following minor trauma or mechanical stress leads to formation of pseudocyst. The auricular cartilage is more susceptible to traumatic insult because of it's lack of connective tissue overlying the cartilage with firm adherence to the skin.[3]

Repeated minor trauma to the pinna like rubbing, ear pulling, sleeping on hard pillows, minor sports injuries,wearing of tight motorcycle helmet & ear phones etc. are the probable causes of the pseudocyst formation.[4]

This condition iscommonly seen in adult males of 30-40 age groups. The swelling due to pseudocyst ranges from 1-5 cm and contains clear fluid.[1]

Pseudocyst pinna though uncommon still a difficult condition to treat. It is notorious for recurrence.[5] many surgical approaches have been proposed in the literature with varied recurrence and failure rates but none of them is gold standard till date.

In this case series, treatment for all cases of pseudocyst pinna were done by posterior cartilage window technique and the results were observed.

AIM OF THE STUDY

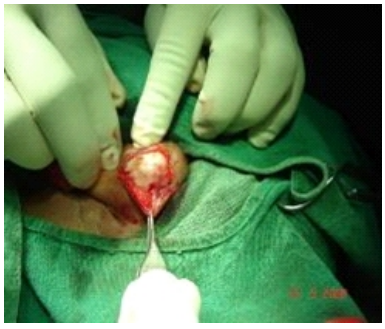
In this case series attempts have been made to find out the efficacy of posterior cartilage window technique for the treatment of pseudocyst pinna. The failure &recurrence rates and the complications were observed.

MATERIALS & METHOD

This study was carried out on 38 patients in the Department of ENT, IMS & SUM Hospital, Bhubaneswar, for for a period of 7 years from January-2008 to January 2015.

Cases of pseudocyst pinna those underwent surgical treatment by posterior cartilage window technique were included in this study. All the cases were strictly followed for 8 weeks after the surgery. All the surgeries were performed by the first author under local anesthesia using 2% lignocaine with 1:200000 adrenaline.

{fig-1}



{Fig-2} skin incision & exposure of cartilage

A linear incision is made in the posterior aspect of the pinna measuring about 1.5cms corresponding to the pseudocyst location **{fig-2}.** Skin is gently elevated and the cartilage is exposed **{fig-2}.** A rectangular piece of cartilage is excised and the serous fluid is sucked out **{fig-3}.** The wound is closed using 3-0 vicryl with a corrugated drain in situ followed by pressure bandage **{fig-4}.** Patients are put on antibiotics and analgesics for 1 week and the drain is removed after 2 days. The patients are advised for follow-up at the end of 1st week,4th week and 8th week.

{fig-3} rectangular piece of cartilage taken out

{fig-4} wound closure

OBSERVATION:

Total number of cases of pseudocyst pinna encountered during the study period were 47 out of which 9 patients refused for any surgical intervention. The remaining 38 patients underwent surgical treatment by posterior cartilage window technique. Out of 38 patients 32 (84.2%) were male and 5 (15.8%) were females. The age range was from 23 years to 49 years **(table-1)**

Table-1

Total no of cases	38
Male	32
Female	5
Age group	**No.of cases**
21-30	12
30-40	22
40-50	4

All the 38 cases were followed for a period of 8 weeks. The follow-up was done at the end of 1st week to find out any immediate complications and recurrence. The 2nd& 3rd follow-up were done at the end of 4th& 8th week respectively to notice any late complications, cosmetic deformity and the recurrence of the swelling.In this case series not a single complication, no incidence of recurrence and no cosmetic deformity of the pinna were observed.

DISCUSSION

The pseudocyst pinna was first reported by Engel in 1966 in the Chinese population.[6] This condition is more prevalent among males. In this series it is found that out of all cases of pseudocyst pinna 84.2% were males and 15.8% were females. These findings are similar to the findings of Lim CM where he reported the incidence of the disease among males and females were 87% & 13% respectively.[7]

The commonly used treatment modalities for this condition are simple aspiration, aspiration & pressure bandage, aspiration with intraluminal steroid, incision and drainage, aspiration & suturing of button etc.[5,7] Many reported case series in literature with different surgical technique produced varied rate of recurrence and complications.

In this case series not a single complication and a single recurrence was observed which is comparable to the observation made by Sangeetha R & H. Vijayendra[1]. A similar observation were also made by KoiralaK, Rai S, Chhetri S etal in 2011.[8]

No alteration of the shape of the pinna was observed in this study which is also similar to the observations of Sangeetha R, H.Vijayendra[1]and Koirala K etal[8] in their respective study.

It is observed in this study that this surgical approach is safe, reliable, risk free with no recurrence.

CONCLUSION

Posterior cartilage window technique for pseudocyst pinna ensures complete drainage and prevents recollection. This method avoids repeated aspiration and complications like perichondritis. This method is safe, associated with no recurrence and cosmetically well accepted.

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