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# A New Method of Surgical Management for Pseudocyst of Pinna

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**Abstract- Introduction:** Pseudocyst of pinna is not very common problem in ENT practice. This is a benign painless cystic swelling arising in pinna and visible on lateral surface of pinna. No obvious cause of this swelling can be identified. This is an intra cartilaginous cyst without any epithelial lining. So, the name pseudocyst. There is no definite and effective medical treatment for this pseudocyst. There are so many surgical treatments available. We describe a novel minimal surgical technique for this condition.

**Methods:** 24 patients 19 male and 5 female ages ranging from 25 -45 years were included in this trial. All patients were selected from ENT out patient department of Khulna Medical College Hospital and from my private consultancy Clinic between 1st January 2015 to 31st December 2018.

**Keywords:** *pinna, pseudocyst, new technique.*

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# A New Method of Surgical Management for Pseudocyst of Pinna

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**Abstract- Introduction:** Pseudocyst of pinna is not very common problem in ENT practice. This is a benign painless cystic swelling arising in pinna and visible on lateral surface of pinna. No obvious cause of this swelling can be identified. This is an intra cartilaginous cyst without any epithelial lining. So, the name pseudocyst. There is no definite and effective medical treatment for this pseudocyst. There are so many surgical treatments available. We describe a novel minimal surgical technique for this condition.

**Methods:** 24 patients 19 male and 5 female ages ranging from 25 - 45 years were included in this trial. All patients were selected from ENT out patient department of Khulna Medical College Hospital and from my private consultancy Clinic between 1st January 2015 to 31st December 2018. With proper aseptic measure and under local anesthesia very small stab incision was given by no15 BP blade on most dependent part of the cyst and a ventilation tube made up of plastic tube of a butterfly needle inserted through the stab incision just like a grommet insertion on tympanic membrane. Both ends of the plastic tube was just heated by gas lighter and pressed on metallic smooth surface so that ends of the tube took a shape of grommet. These patients were followed up over 3 months.

**Results:** 22 patients had successful outcome. We observed complete resolution after 2 weeks. Patients were advised to restrict head bath to avoid water entry through the tube while the tube was in situ. 2 patients developed secondary infection which were controlled by broad spectrum antibiotics and got cured without any other complications.

**Conclusion:** The new technique of surgical management is very simple, inexpensive, and effective minimal surgical method of management for the pseudocyst of pinna.

**Keywords:** pinna, pseudocyst, new technique.

## I. INTRODUCTION

Pseudocyst of pinna is an idiopathic benign painless cystic swelling developed spontaneously on the lateral aspect pinna due to accumulation of fluid. It is an intra cartilaginous cyst without having any epithelial lining. The common sites of origin are cymba

concha, scaphoid fossa and triangular fossa of the pinna(1). These lesions are also named as endochondral pseudocyst, intra cartilaginous cyst and benign idiopathic cystic chondromalacia (2).

Histologically these are intra cartilaginous cyst without having any epithelial lining hence it is called pseudocyst. The fluid inside the cyst is yellow or straw colored serous or viscous fluid containing glucose and protein(3). The lesions are mostly unilateral.

These are simple lesions sometimes incidentally found by close contact but difficult to manage either by medical or surgical procedure. Hence there are so many modalities of management described in literature. Whatever modality of treatment is applied the aim of treatment includes restoration and preservation of normal appearance of pinna and prevention of recurrence(3).

We describe our experience of management of these comparatively less common simple lesions of pinna by applying our new and minimal surgical technique.

## II. MATERIALS AND METHODS

24 patients were diagnosed clinically as pseudocyst of pinna in my private consultation clinic between 1st January 2015 to 31st December 2018. The procedure to be done was explained to the patients and their written consent taken for enrolment in the study.

Diagnosis was made by clinical examination and confirmed by aseptic aspiration of non-purulent straw or yellow color fluid from the cyst during surgical procedure.

All patients were posted for our minimal invasive new technique of surgical intervention. With all aseptic precaution and under local anesthesia a stab incision was given on selected dependent part of the cyst and through that stab incision instantly made ear grommet type drain tube made up of butterfly needle set inserted. This self-retaining type of drain tubes were kept in situ for two weeks. After two weeks we observed complete resolution of the cyst. Then we removed the drain tube. The patients were followed up once in a month for 3 months to see any recurrence.

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### III. RESULTS

Twenty-four patients were diagnosed as cases of pseudocyst of pinna from January 2015 to December 2018. The age distribution in our study group ranged from 25 to 45 years. The lesions were seen more in scaphoid fossa followed by triangular fossa and cymba concha. Twenty-two patients had complete resolution within two weeks. Two patients developed secondary infection which was effectively controlled by broad spectrum antibiotics and subsequently cured.

### IV. DISCUSSION

The pseudocyst of pinna is fairly an uncommon problem found among adult and predominantly in males (79.16%) in our study group consistent with other reports. The sites of origin were scaphoid fossa, triangular fossa and cymba concha in order of precedence. The predisposing factors and etiology were not known. Its pathogenesis is hypothetical as yet. Hormonal factor may play a part for male predominance (4).

Abnormal release of lysosomal enzymes from chondrocytes give rise to progressive dilatation and formation of intra cartilaginous cavity (5). One hypothesis explained congenital embryonic dysplasia of the auricular cartilage that leads to formation of pseudocyst (6).

There is no single accepted method of treatment for this condition. The various modalities of treatment are close aspiration and pressure bandage, aspiration with buttoning, aspiration and intralesional corticosteroid injection, anterior wall deroofing, incision and curettage of cartilage wall, intralesional sclerosing agents etc. are being practiced (6) (7)(8). Fibrin glue as a sealing material between the two flaps of cartilage has been reported (9). Whatever method is applied to treatment there is every chance of recurrence in significant number of cases (10)(11).

### V. CONCLUSION

Almost in all methods of treatment required compression dressing which is difficult to provide and maintain. Our new technique of grommet type plastic tubedrainout insertion through a stab incision does not require any pressure dressing. Moreover, it is simple cost effective and compliant to patient with acceptable outcome.

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*Ethical Committee Approval:* The study was approved by Local Ethical Committee.

*Informed Consent:* Duly signed informed consent was taken from all patients.

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There is no conflict of interest.



Fig-1



*Fig-2*

