

1 A New Method of Surgical Management for Pseudocyst of Pinna

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7 Abstract

8 Pseudocyst of pinna is not very common problem in ENT practice. This is a benign painless
9 cystic swelling arising in pinna and visible on lateral surface of pinna. No obvious cause of this
10 swelling can be identified. This is an intra cartilaginous cyst without any epithelial lining. So,
11 the name pseudocyst. There is no definite and effective medical treatment for this pseudocyst.
12 There are so many surgical treatments available. We describe a novel minimal surgical
13 technique for this condition. Methods: 24 patients 19 male and 5 female ages ranging from 25
14 -45 years were included in this trial. All patients were selected from ENT out patient
15 department of Khulna Medical College Hospital and from my private consultancy Clinic
16 between 1st January 2015 to 31st December 2018.

18 *Index terms*— pinna, pseudocyst, new technique

19 1 Introduction

20 pseudocyst of pinna is an idiopathic benign painless cystic swelling developed spontaneously on the lateral aspect
21 pinna due to accumulation of fluid. It is an intra cartilaginous cyst without having any epithelial lining. The
22 common sites of origin are cymba concha, scaphoid fossa and triangular fossa of the pinna (1). These lesions are
23 also named as endochondral pseudocyst, intra cartilaginous cyst and benign idiopathic cystic chondromalacia
24 (2).

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

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

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

34 2 II.

35 3 Materials and Methods

36 24 patients were diagnosed clinically as pseudocyst of pinna in my private consultation clinic between 1st January
37 2015 to 31st December 2018. The procedure to be done was explained to the patients and their written consent
38 taken for enrolment in the study.

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

41 All patients were posted for our minimal invasive new technique of surgical intervention. With all aseptic
42 precaution and under local anesthesia a stab incision was given on selected dependent part of the cyst and

7 CONCLUSION

43 through that stab incision instantly made ear grommet type drain tube made up of butterfly needle set inserted.
44 This self-retaining type of drain tubes were kept in situ for two weeks. After two weeks we observed complete
45 resolution of the cyst. Then we removed the drain tube. The patients were followed up once in a month for 3
46 months to see any recurrence.

47 4 III.

48 5 Results

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

54 IV.

55 6 Discussion

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

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

63 There is no single accepted method of treatment for this condition. The various modalities of treatment
64 are close aspiration and pressure bandage, aspiration with buttoning, aspiration and intralesional corticosteroid
65 injection, anterior wall deroofting, incision and curettage of cartilage wall, intralesional sclerosing agents etc. are
66 being practiced (6) (7) (8). Fibrin glue as a sealing material between the two flaps of cartilage has been reported
67 (9). Whatever method is applied to treatment there is every chance of recurrence in significant number of cases
68 (10) (11).

69 V.

70 7 Conclusion

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

74 Fig- ??

75 Ethical Committee Approval: The study was approved by Local Ethical Committee.
76 Informed Consent: Duly signed informed consent was taken from all patients.
77 Financial Disclosure: The authors declare that the study received no fund from any source. There is no conflict
78 of interest.
79 Fig- ??

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