



ENT

PREVALENCE OF CHOLESTEATOMA IN SAFE TYPE OF CHRONIC OTITIS MEDIA WITH CENTRAL PERFORATION

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ABSTRACT

Introduction:- CSOM is chronic inflammation of ME cleft and mastoid cavity which presents with recurrent ear discharge or otorrhoea through TM perforation. It is one of the most common ear diseases in developing countries like India because of poor hygiene and dietary condition. CSOM is classified into safe (tube tympanic) and unsafe (attico-antral).

Material and Method :- The study has been conducted over a period of 2 year in the department of ENT & Head/Neck surgery Rohilkhand Medical College & Hospital Bareilly U.P. 80 patients were taken up for study out of which 40 were male and 40 were female with consideration for particular type of CSOM i.e. safe or tubotympanic type. All necessary investigations were done including PTA and X-ray mastoid.

Result :Cholesteatoma was found in 5(6.2%) patients of chronic suppurative otitis media with central perforation.

Conclusion : Although cholesteatoma is found commonly found in attic and marginal perforation but can also be found in cases of C.P. and that the disease cannot be said to be safe or unsafe type depending on the site of disease (TT or AA).

KEYWORDS : Cholesteatoma, Chronic Suppurative Otitis Media, Safe Ear, Tubo Tympanic

INTRODUCTION

CSOM is chronic inflammation of ME cleft and mastoid cavity which presents with recurrent ear discharge or otorrhoea through TM perforation [1]. It is one of the most common ear diseases in developing countries like India because of poor hygiene and dietary condition. Passive exposure to smoking & bottle feeding are few of the risk factors that lead to development of CSOM by lowering the immunity level and encouraging early infection [2- 6]. CSOM is classified into safe (tube tympanic) and unsafe (attico-antral). The safe variety of CSOM i.e. CSOM without cholesteatoma can be further classified into active or inactive depending on whether there is infection or not [7]. The complications are because of cholesteatoma that causes bone erosion and necrosis involving facial nerve, inner ear and intra cranial components. Central perforation or tubotympanic type is considered safe as it is not associated with cholesteatoma. It can be anterior, posterior, total and subtotal or large perforation.

MATERIAL AND METHOD

The study has been conducted over a period of 2 year in the department of ENT & Head/Neck surgery Rohilkhand Medical College & Hospital Bareilly U.P. 80 patients were taken up for study out of which 40 were male and 40 were female with consideration for particular type of CSOM i.e. safe or tubotympanic type. Patients with prior history of temporal bone trauma and H/L without any H/o ear discharge and without other type of CSOM except central type were excluded from the study. Detailed history, EUM, PTA and X-ray B/L mastoid and HRCT temporal bone were evaluated.

INCLUSION CRITERIA

Patient of CSOM with central type of perforation Active/Inactive willing for surgery.

EXCLUSION CRITERIA

1. Patients of CSOM with other types of perforation except central type
2. Patients not-willing for surgery
3. Patient with prior H/O Temporal bone trauma

OBSERVATION AND RESULTS**AGE GROUP (IN YEARS)**

TABLE-1

Age Group(in years)	No of Patients	Percentage(%)
10-25	18	22.5
26-40	32	40.0
41-55	22	27.5
56-70	8	10.0
Total	80	100.0

GRAPH-1

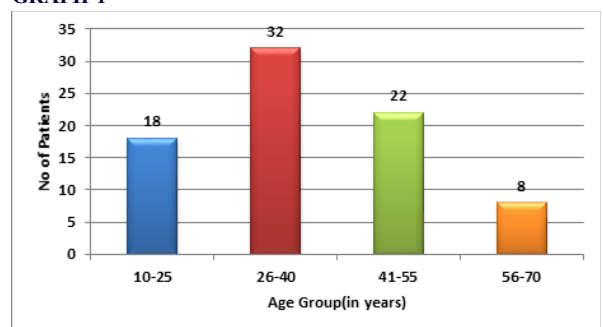
**GENDER**

TABLE-2

Gender	No of Patients	Percentage (%)
Male	40	50.0
Female	40	50.0
Total	80	100.0

GRAPH-2

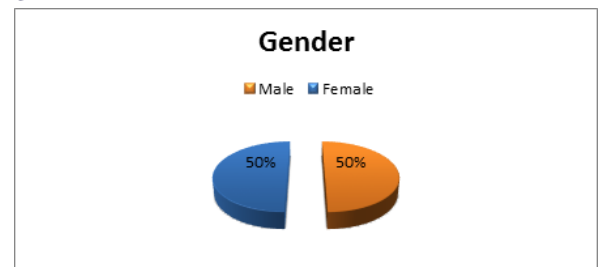
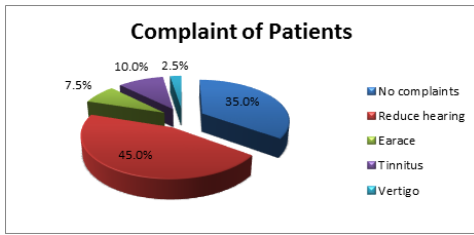
**COMPLAINTS**

TABLE-3

Complaint of Patients	No of Patients	Percentage(%)
No complaints	28	35.0
Reduce hearing	36	45.0
Earache	6	7.5
Tinnitus	8	10.0
Vertigo	2	2.5
Total	80	100.0

GRAPH-3

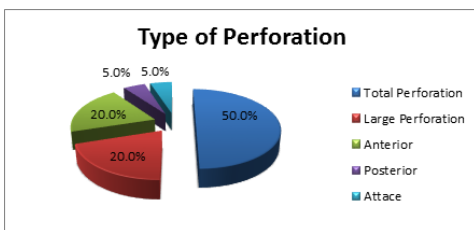


TYPE OF PERFORATION

TABLE-4

Type of Perforation	No of Patients	Percentage(%)
Total Perforation	40	50.0
Large Perforation	16	20.0
Anterior	16	20.0
Posterior	4	5.0
Attic	4	5.0
Total	80	100.0

GRAPH-4



PATHOLOGICAL FINDING

TABLE-5.

Pathological findings	No of Patients	Percentage(%)
Dry Perforation	44	55.0
Granulations	16	20.0
Active discharge	9	11.3
Aural polyps	6	7.5
Cholesteatoma	5	6.2
Total	80	100.0

GRAPH-5

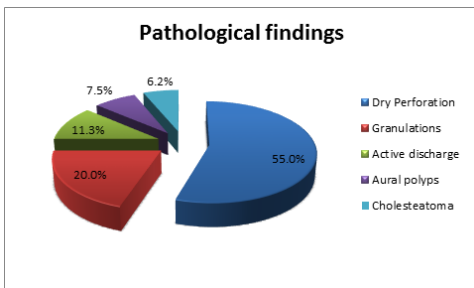
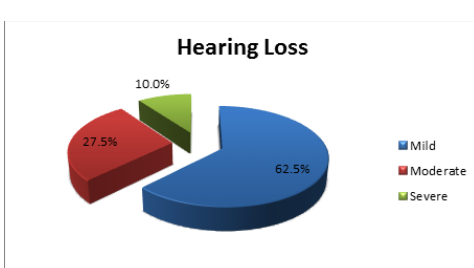


TABLE-6.

Hearing Loss	No of Patients	Percentage(%)
Mild	50	62.5
Moderate	22	27.5
Severe	8	10.0
Total	80	100.0

HEARING LOSS

GRAPH-6



DISCUSSION

Cholesteatoma is predominantly a disease of young adults. Our study included maximum of patients between the age group of 26-40 years. This can be compared to a study on 50 cases of tubo-tympanic type of CSOM [8]. Majority of the patients came with complains of reduced hearing (45%), with no complains (35%) followed by earache (7.5%), tinnitus(10%) and vertigo(2.5%). Most common type of perforation was total perforation (50 %) followed by large perforation (20 %) anterior(20 %), posterior(5 %) and attic(5%). Although a central perforation of TM is the typical finding of CSOM without cholesteatoma a keratinizing squamous epithelium on the tympanic side of TM or in the tympanic cavity is occasionally found in during surgery.

Majority of the patients had mild conductive hearing loss (62.5%) followed by moderate conductive H.L. (27.5%) and severe hearing loss (10 %).

CONCLUSION

The study reveals that though cholesteatoma is found commonly found in attic and marginal perforation but can also be found in cases of C.P. and that the disease cannot be said to be safe or unsafe type depending on the site of disease (TT or AA). All patients coming with CSOM of any type of perforation and irrespective of the ear condition whether dry or wet should be investigated thoroughly to rule out the pathology of cholesteatoma.

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