

STATUS OF CONTRALATERAL EAR IN PATIENTS WITH UNILATERAL CSOM AND ROLE OF ENDOSCOPY IN ITS ASSESSMENT

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ABSTRACT

Background:- Chronic suppurative otitis media is a result of product of a series of events in a ear which require complete evaluation of both ears. In the field of ENT, endoscopy play a major role both as a diagnostic tool as well as therapeutic tool. In the present study we aimed to know the status of contralateral ear in patients with unilateral CSOM and role of endoscopy in its assessment.

Methods :- A prospective study was done on CSOM patients attending ENT department of tertiary care hospital. Patients were analysed clinically using otoscope, radiologically , audiological and endoscopically using otoendoscope.

Results :- A total of 50 patients were evaluated out of which 60% were males and 40% were females. Otoendoscopy reveals diseased contralateral ear in 70% of patients. Radiologically 72% contralateral ear is sclerosed. PTA finding reveals hearing loss in 60% contralateral ear.

Conclusion :- From this study , we can conclude that evaluation of contralateral ear is must to identify the hidden pathology in CSOM patients.

KEYWORDS

CSOM, contralateral ear , otoendoscopy.

INTRODUCTION :

Chronic suppurative otitis media is defined as a permanent abnormality of pars tensa or flaccida, more likely a result of acute otitis media, negative middle ear pressure or otitis media with effusion¹, clinically presented with ear discharge and deafness². CSOM doesn't seem to be an isolated event that occur in a particular patient rather it is a product of series of events in subepithelial and epithelial levels in middle ear cleft. In the absence of therapeutic resolution , chronicity may ensue.

Contralateral ear is defined as asymptomatic ear in cases of unilateral COM , since both ears had a common nasopharyngeal drainage, therefore assessment of contralateral ear is essential as the pathological series which are detected in affected ear are responsible for the disease in contralateral ear³.

Evaluation of both ears plays a fundamental role in the prognostic evaluation of the patient, because the affected ear can serve as a guide for probable evaluation in contralateral ear.

Otoendoscopy is an upcoming day care procedure in the field of otology. Otoendoscopy a more advanced form of minimally invasive surgery than the microscopy alone and is hence associated with reduced surgical morbidity.

AIMS & OBJECTIVES

To study the status of CLE in patients presenting with unilateral COM
To study the usefulness of otoendoscopy in COM patients

METHODS & MATERIALS

A prospective study of 50 patients attending ENT OPD of GMC, Bhopal with unilateral COM with or without cholestatoma was conducted in a period of 4 months from September 2020 to December 2020.

All patients with unilateral COM are examined by taking relevant history followed by clinical examination of both ears with otoscope/otoendoscope (0* endoscope 40mm diameter). X-ray mastoid bilateral schuller's view was done to know the status of mastoid air cell system in B/L ear.

All patients underwent audiological testing like puretone audiometry and impedance audiometry to know the hearing status of the ear.

INCLUSION CRITERIA

Patients with age group of 10 – 50 years are taken in study who presented in ENT OPD with complaints of unilateral ear discharge and reduced hearing.

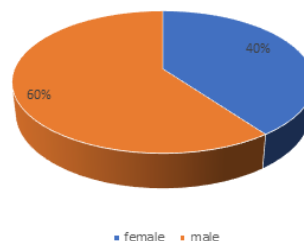
EXCLUSION CRITERIA

1. Patients with age group less than 10 years and more than 50 years

2. Patients with bilateral ear discharge
3. Patients with previous history of ear discharge, ototoxicity, noise induced trauma, head injury and pregnancy.

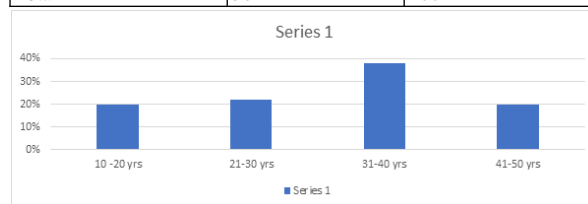
RESULTS

A total of 50 patients were evaluated out of which 30 were males (60%) and 20 were females



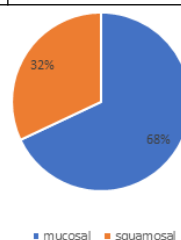
1] Age wise distribution of patients

Age group (years)	Number	Percentage (%)
10 – 20	10	20
21 – 30	11	22
31 – 40	19	38
41 – 50	10	20
Total	50	100



2] Type of disease

Type	Number	Percentage (%)
Squamosal	16	32
Mucosal	34	68
Total	50	100



3] Otoendoscopic findings in opposite ear

OTOENDOSCOPIC FINDINGS		PERCENTAGE
Normal		15 (30%)
Retraction of pars tensa	Grade 1	13(26%)
	Grade 2	4(0.8%)
	Grade 3	3(0.6%)
	Grade 4	1 (0.2%)
Retraction of pars flaccida		3 (0.6%)
Otitis media with effusion		2 (0.5%)
Tympanosclerosis		9 (18%)

5] PTA finding of contralateral ear

Decibel	Hearing loss	Number	Percentage (%)
<30	Normal	20	40
30-55	Mild	17	34
55-70	Moderate	13	26
70-90	Severe	0	0
>90	Profound	0	0
Total		50	100

7] Impedance finding of contralateral ear

Type	Number	Percentage (%)
A	20	40
B	10	20
As	12	24
Ad	6	12
C	2	4
Total	50	100

DISCUSSION

Chronic suppurative otitis media is one of the major health issue that are presenting to ENT clinics. Otoendoscopy is a boom to the otologist. Procedure of otoendoscopy was first described by Mer at al.

In our study, the most common age group affected was 21-30 years with mean age of presentation 23.14 years. It is in concordance with the study done by Damghani et al where mean age of CSOM patients was 23 years.

In our study, mucosal type of chronic otitis media was common (68%) which is in concordance with the study by Prakash et al and Shireen et al.

In this study, male preponderance was observed which is in concordance with the study done by Soni et al. It can be explained because patients with squamosal CSOM seek medical advice only when they get significant hearing problem or complication of CSOM.

In our study, most common otoendoscopic finding in contralateral ear is Grade 1 retraction of pars tensa followed by tympanosclerosis which is in concordance with study done by Soni et al.

In our study, 60% patients had some degree of conductive type of deafness in contralateral ear which is in concordance with study done by Prakash et al.

In our study around 60% patients got abnormal tympanogram in contralateral ear .

As per Deguine C, the images are of excellent resolution hence photographing these images provide excellent results.

CONCLUSION

Evaluation of contraletal ear in unilateral CSOM is crucial as majority of times some hidden pathology is present in opposite ear which requires treatment. Otoendoscopy plays a great role in diagnosing these hidden pathologies and helps in subsequent treatment.

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