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Original research article

A study on clinical profile of patients with CSOM attending tertiary care hospital

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Abstract

Chronic Otitis Media (COM) is defined as a permanent abnormality of the pars tensa or flaccid most likely a result of earlier acute otitis media, negative middle ear pressure or otitis media with effusion. COM equates with the classic term Chronic 'Suppurative' Otitis Media that is no longer advocated as COM is not necessarily a result of 'the gathering of pus'. CSOM patients who were planned for surgical management underwent HRCT temoral bone scan before surgery. Intra operative findings of middle ear cleft in such patients was noted and compared with the pre-operative HRCT temporal bone scan findings. More number of patients belong to age group 10 -19 years (34%) followed by 20-29 years (30%) and 30-39 years (25%). Nearly 12% of study subjects were aged more than 40 years. There were 89 (49.4%) males and 91(50.5%) females in the study population. 113 patients had unilateral CSOM and 67 patients had bilateral CSOM disease.

Keywords: Clinical profile, CSOM, otitis media.

Introduction

Otitis media is defined as -"an inflammation of the middle ear without reference to etiology or pathogenesis". Otitis media also implies concomitant inflammation, to a greater or lesser extent, of the mastoid air cell system, owing to its anatomic linkage to the middle ear cleft [2]. Accordingly, otitis media is more correctly conceived of as an inflammatory disorder of the entire tympanomastoid compartment [2]. COM is a major global cause of hearing impairment and this may have serious long term effects on language, auditory, cognitive development and educational progress [3]. The condition is considered - chronic if the tympanic membrane defect is present for more than 3 months. Thus a draining middle ear cavity that is associated with a perforation from acute otitis media would not qualify for this diagnosis if it responds to treatment within 3 months [4].

Histologically, COM is defined as irreversible mucosal changes within the middle ear cleft [5].

Chronic Otitis Media (COM) is defined as a permanent abnormality of the pars tensa or flaccid most likely a result of earlier acute otitis media, negative middle ear pressure or otitis media with effusion. COM equates with the classic term Chronic 'Suppurative' Otitis Media that is no longer advocated as COM is not necessarily a result of 'the gathering of pus'.

On occasion, a permanent, central perforation of the tympanic membrane can remain dry, with only rare intermittent drainage, that is, inactive COM [6].

More typically, chronic or recurrent mucoid otorrhea, that is, active COM is provoked by exposure of the tympanic mucosa to bacteria of the external auditory canal as well as of the Eustachian tube.

Methodology

Source of data

CSOM patients presenting to hospital which is a tertiary care centre and who are undergoing ear surgery.

Methods of collection of data

- CSOM patients who were planned for surgical management underwent HRCT temoral bone SCAN before surgery.

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- Intra operative findings of middle ear cleft in such patients was noted and compared with the pre-operative HRCT temporal bone scan findings.

Design of study: Cross sectional comparative study.

Sample size: 180 patients.

Inclusion criteria
CSOM patients above 10 years who are undergoing ear surgery.

Exclusion criteria
- Patients with revision surgery.
- Patients with congenital anomalies of temporal bone.
- Patients with other temporal bone diseases.

Results and Discussion

Table 1: Age distribution

Age groups	Number	Percentage
10-19	61	33.9
20-29	54	30.0
30-39	45	25.0
40-49	10	5.6
50-59	5	2.8
≥60	5	2.8
Total	180	100.0

More number of patinets belong to age group 10 -19 years (34%) followed by 20-29 years (30%) and 30-39 years (25%). Nearly 12% of study subjects were aged more than 40 years

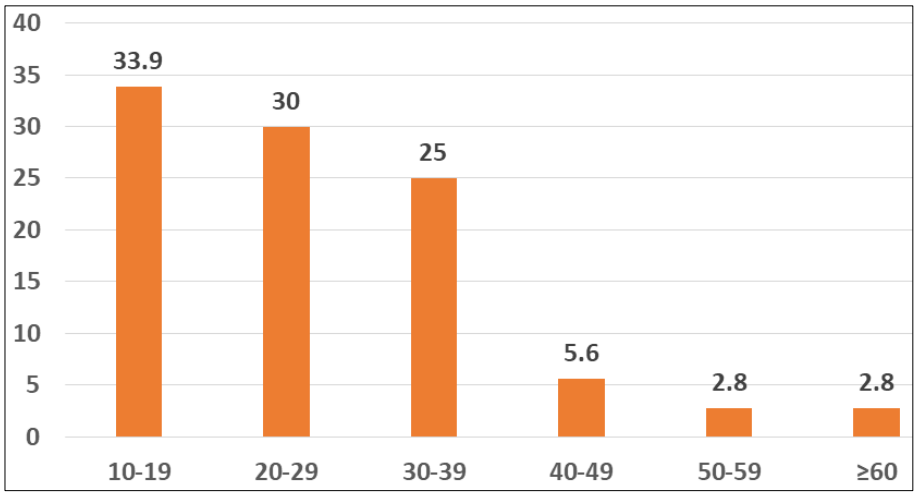

Fig 1: Age distribution (in years)

Table 2: Gender distribution

Gender	Number	Percentage
Male	89	49.4
Female	91	50.5
Total	180	100

Study subjects included both males and females, male constituted 49.4% and females 50.6%

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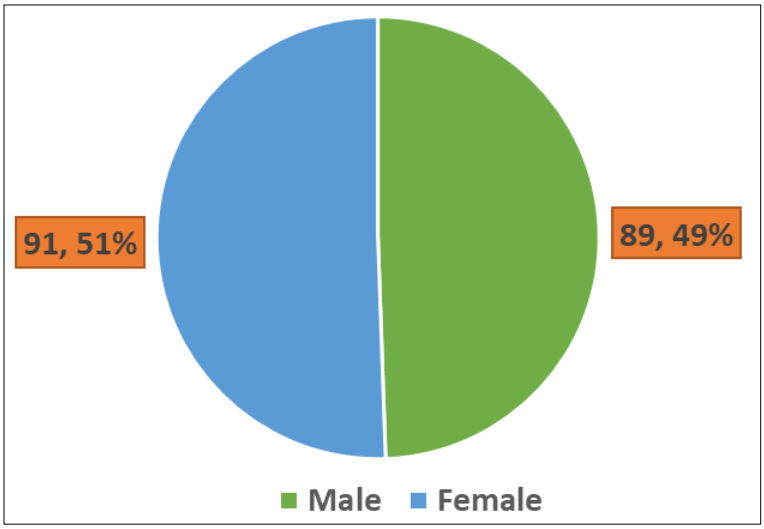

Fig 2: Gender

Table 3: Laterality

Laterality	Number	Percentage
Right	98	54.4
Left	82	45.6
Total	180	100.0

Right ear was more commonly affected

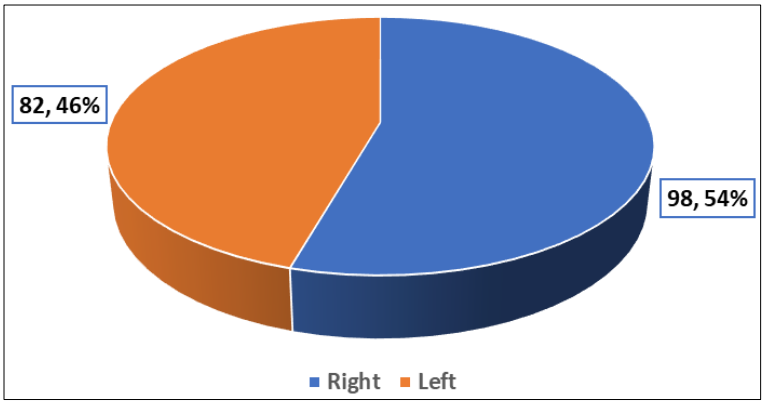

Fig 3: Laterality

Table 4: Ear discharge

Ear discharge	Number	Percentage
Unilateral	113	62.8
Bilateral	67	37.2
Total	180	100.0

Bilateral discharge was seen in 37.2% of patients

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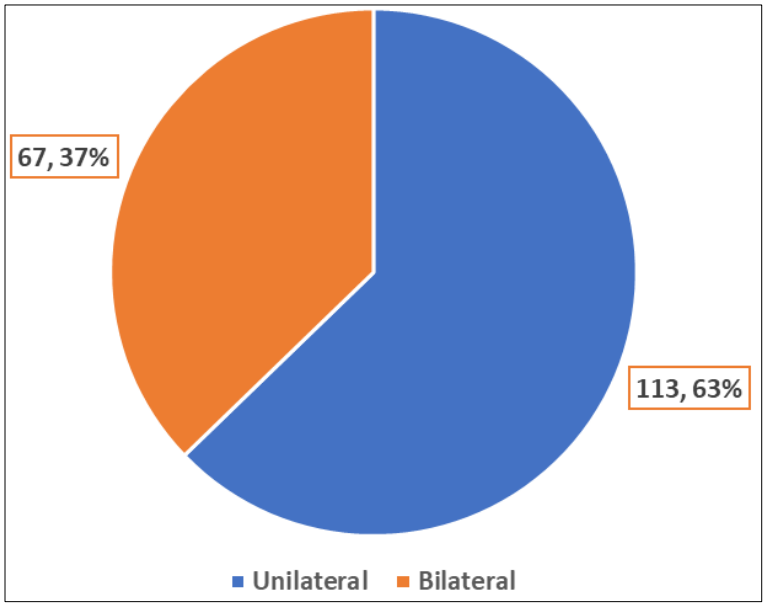

Fig 4: Ear discharge

Conclusion

33.9% (61) of patients in the age group of 10-19 years, 30% (54) in 20-29 years, 25% (45) in 30-39 years, 5.6% (10) in 40-49 years, 2.8% (5) in 50-59 years and 2.8%(5) were above 60 years of age.
There were 89 (49.4%) males and 91(50.5%) females in the study population. 113 patients had unilateral CSOM and 67 patients had bilateral CSOM disease.

References

1. Banerjee A, Flood LM, Yates P, *et al*. Computed tomography in suppurative ear disease: does it influence management? J Laryngol Otol. 2003;114:454-458.
2. Watts S, Flood LM, Klifford K. A systematic approach to interpretation of computed tomography scans prior to surgery of middle ear cholesteatoma. J Laryngol Otol. 2000;114:248-253.
3. Leighton SEJ, Robson AK, Anslow P. The role of CT imaging in the management of chronic suppurative otitis media. Clin Otolaryngol. 1993;18:23-29.
4. Yates PD, Flood LM, Banerjee A, *et al*. CT scanning of middle ear cholesteatoma: what does the surgeon want to know? Br J Radiol. 2002;75:847-852.
5. Sade J. Middle ear mucosa. Arch Otolaryngol. 1966;84:137-143.
6. Gleeson M, Felix H, Neivergelt J. Quantitative and qualitative analysis of the human middle ear mucosa. In: Sade J, editor. The Eustachian tube, basic aspects. Amsterdam: Kugler and Ghedini; c1991. p. 125-31.