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Study Of Clinical Presentation Of Chronic Supportive Otitis Media (CSOM).

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ABSTRACT

Chronic suppurative otitis media (CSOM) is often accompanied by inflammatory symptoms such as discharge and pain from the ear. Often patients, with or without cholesteatoma, suffer from hearing loss that leads to communication problems and social withdrawal, and the histories of both diseases can be very similar. A total of 100 patients visiting the Department of Otolaryngology during last one years for treatment of CSOM with definitive cholesteatoma were included in this study. The patients were diagnosed as CSOM with definitive cholesteatoma by taking history in detail in a prescribed study protocol and examination of ear, nose and throat including otoscopy under magnification. In our study, highest number of patients was in the 11-20 years of age. The age of the patients ranged from 6 years to 40 years. The highest number of patients was in the 11-20 years age group (64 %). The number of males and females was 74% and 26%, respectively. Almost all the patients presented with multiple symptoms. The most common symptoms were discharge from ear(s) (100.0%), hearing impairment (82%), earache (11%), fleshy mass in ear(6 %), etc The patients with extracranial and intracranial complications. Of the patients, 72 % cases were without complication, 24% with extracranial complication and 4 % with intracranial complication. In conclusion, the pattern of clinical presentation and complication of CSOM shows highest number of patients was in the 11-20 years of age. The most common symptoms were discharge from ear(s) with male predominance. Extracranial complications are more commonly observed.

Keywords: Chronic suppurative otitis media, cholesteatoma

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INTRODUCTION

Chronic suppurative otitis media (CSOM) is often accompanied by inflammatory symptoms such as discharge and pain from the ear. Often patients, with or without cholesteatoma, suffer from hearing loss that leads to communication problems and social withdrawal, and the histories of both diseases can be very similar. A cholesteatoma is a lesion of unknown origin that is a slowly progressing, destructive fissure in the middle ear of a whitish glossy sac or sac lined by stratified squamous epithelium containing concentric layers of keratinous substance. caused by formation.

Impregnated with cholesterol crystals. It can destroy surrounding soft and hard tissues and cause extracranial and intracranial complications [3].

According to presumed etiology, cholesteatoma can be congenital and acquired [1, 2].

MATERIALS AND METHOD

A total of 100 patients visiting the Department of Otolaryngology during last one years for treatment of CSOM with definitive cholesteatoma were included in this study. The patients were diagnosed as CSOM with definitive cholesteatoma by taking history in detail in a prescribed study protocol and examination of ear, nose and throat including otoscopy under magnification. Radiological investigations included X-ray of mastoid bones in Towne's and Stenver's views and were done in all the cases. Audiometric investigations were done in patients without intracranial complication.

RESULTS

Table 1: Age wise distribution of patients

Age range (Years)	Number of patients
< 10	8
11 to 20	64
21 to 30	21
> 30	7

Table 1 shows the age distribution of the patients. The highest number of patients was in the 11-20 years of age.

In this study, the age of the patients ranged from 6 years to 40 years.

The highest number of patients were in the 11-20 years age group (64 %).

Table 2: Gender wise distribution of patients

Gender	Number of patients
Male	74
Female	26

The number of males and females was 74% and 26%, respectively.

Table 3: Clinical presentation wise distribution of patients

Clinical presentation	Number of patients
Ear discharge	100
Hearing impairment	82
Earache	11
Fleshy mass	6

Almost all the patients presented with multiple symptoms. The most common symptoms were discharge from ear(s) (100.0%), hearing impairment (82%), earache (11%), fleshy mass in ear(6 %), etc

Table 4: Complications wise distribution of patients

Complications	Number of patients
Without complications	72
Extra cranial	24
Intracranial	4

Table 4 shows the patients with extracranial and intracranial complications. Of the patients, 72 % cases were without complication, 24% with extracranial complication and 4 % with intracranial complication.

DISCUSSION

Chronic suppurative otitis media (CSOM) is characterized by the clinical manifestations of hearing loss, otorrhea, ear congestion, earache, headache, and often tinnitus. In addition, there is usually a limited ability to communicate due to hearing loss. This often leads to depression, anxiety, and social withdrawal [3,4]. This leads to reduced health-related quality of life in multiple dimensions (physical, functional, social, psychological and family). A common presenting symptom is hearing loss in the affected ear. Reports of fever, vertigo, and pain should raise concern about intratemporal or intracranial complications. A history of persistent CSOM after appropriate medical treatment should alert the physician to consider cholesteatoma. The etiology is usually polymicrobial. The most common microorganisms found in this pathology *Staphylococcus aureus* (MRSA). Others like are *Pseudomonas aeruginosa*, *Proteus spp*, *Klebsiella spp*, *Bacteroides spp*. and *Fusobacterium spp* can cause the disease.

In our study, highest number of patients was in the 11-20 years of age. The age of the patients ranged from 6 years to 40 years. The highest number of patients was in the 11-20 years age group (64 %). The number of males and females was 74% and 26%, respectively. Almost all the patients presented with multiple symptoms. The most common symptoms were discharge from ear(s) (100.0%), hearing impairment (82%), earache (11%), fleshy mass in ear (6%), etc The patients with extracranial and intracranial complications. Of the patients, 72 % cases were without complication, 24% with extracranial complication and 4 % with intracranial complication. These results are consistent with those of other studies. (1,5,6) Diagnosis of chronic suppurative otitis media is usually clinical. Drainage is cultured. When cholesteatoma or other complications are suspected (as in a febrile patient or one with vertigo or otalgia), CT or MRI is done. Treatments for CSOM may include topical antibiotics (administered into the ear) with or without steroids, systemic antibiotics (given either by mouth or by injection), topical antiseptics and ear cleaning (aural toileting), all of which can be used on their own or in various combinations. Encouraging children to eat healthy foods like fruit and vegetables. Reminding children to blow their nose in a tissue, put the tissue in the bin, and wash their hands. Keeping any objects out of children's ears – except if is part of a health professional's instructions. Not smoking around children, these may cause prevent CSOM.

CONCLUSION

In conclusion, the pattern of clinical presentation and complication of CSOM shows highest number of patients was in the 11-20 years of age. The most common symptoms were discharge from ear(s) with male predominance. Extracranial complications are more commonly observed.

REFERENCES

- [1] Nadol JB Jr, Staecker H, Gliklich RE: Outcomes assessment for chronic otitis media: the Chronic EarSurvey. *Laryngoscope* 2000, 110: 32-35.
- [2] Matsuda Y, Kurita T, Ueda Y, Ito S, Nakashima T. Effect of tympanic membrane perforation on middle-ear sound transmission. *J Laryngol Otol* 2009;123 (Suppl 31):81-9. 2.
- [3] Podoshin L, Fradis M, Ben David Y, Margalit A, Tamir A, Epstein L. Cholesteatoma: an epidemiologic study among members of kibbutzim in Northern Israel. *Ann Otol Rhinol Laryngol* 1986;95:365-8. 7.
- [4] Sadé J, Shatz A. Cholesteatoma in children. *J Laryngol Otol* 1988;102:1003-6. 8. Mawson SR, Ludman H, Wright T. (eds). *Diseases of the ear*. 6th edn. London: Edward Arnold, 1998. 9.



- [5] Ballenger JJ. ed. Diseases of the Nose, Throat, Ear, Head and Neck. 13th edn. Philadelphia: Lea & Febiger, 1985. 10
- [6] .Savic LD, Deleric DR. Facial paralysis in chronic suppurative otitis media. Clin Otolaryngol 1989;14:515-7. 11.