ISSN: 0975-3583, 0976-2833 VOL 14, ISSUE 06, 2023

Original Research Article

CLINICAL PROFILE OF CHRONIC SUPPURATIVE OTITIS MEDIA (CSOM) PATIENTS.

Dr. Siddaram Patil¹, Dr. Harshitha MC², Dr. Girish .P.B.³

¹ Assistant Professor, Dept. of ENT. Gulbarga Institute of Medical Sciences, Kalaburagi, Karnataka.

² Senior Resident, Dept. of ENT. Karwar Institute of Medical Sciences Uttara Kannada, Karnataka.

³ Assistant Professor, Dept. of ENT. Karwar Institute of Medical Sciences Uttara Kannada, Karnataka.

Corresponding Author: Dr. Girish .P.B.

Abstract

Chronic suppurative otitis media (CSOM) is one of the common problems encountered by individuals in India. It can cause permanent hearing loss at a very early age if not treated at earliest. CSOM is a common disease encountered in ENT practice, and proper evaluation and treatment can prevent the morbidity due to its complications. This study was conducted to know the clinical profile of patients with CSOM. It was a cross sectional study of 50 patients with CSOM of all age groups and both sexes, attending the Out Patient Department and those admitted in Otorhinolaryngology wards. 30 % of patients were in age group og 31-40 years. Infection was most common cause of CSOM. 80 % patients had Ear discharge. 44 % had hearing loss. 64 % had pain in ear. 48 % patients had Mucopurulent ear discharge and 22 patients % had Purulent ear discharge .Recurrent ear infection will cause hearing impairment over the years as a result of mucosal changes in the windows and ossicles. CSOM is a common condition in developing countries and requires support and cooperation of both medical professionals and patients for the proper and timely management of the problem. Key words: Clinical profile, CSOM.

Introduction

Chronic otitis media (COM) is an inflammatory process in the middle-ear space that results in long-term, or permanent changes in the tympanic membrane including atelectasis, dimer perforation, tympanosclerosis, retraction pocket development, formation, cholesteatoma.[1] Chronic otitis media is a major public health problem especially in developing countries. Malnutrition, overcrowding, substandard hygiene, frequent upper respiratory tract infections are all listed as risk factors.[2,3] CSOM is an important cause of hearing loss particularly in the developing world.[4] It can be found in all age groups and is a major social burden. It is the commonest childhood infectious disease worldwide starting early in life, but in our environment, presentation may be in adult life.[5] Patients with tympanic membrane perforations who continue to have mucoid ear discharge for 6 weeks to 3 months despite medical treatment, are recognised as CSOM cases. CSOM typically produces a mild to moderate conductive hearing loss. Higher levels of hearing loss maybe seen if the infectious process involves the cochlea or nerve or if there is exposure to ototoxic drugs. Mortality and disability due to otitis media are mainly related to the complications of CSOM.[6] The etiology of CSOM remains multifactorial, with demographics, genetic, environmental, and other health-related factors like infections, trauma, allergy, asthma,

ISSN: 0975-3583, 0976-2833 VOL 14, ISSUE 06, 2023

Eustachian tube dysfunction, cleft palate, and adenoid hypertrophy, etc playing a role in its onset and progression. Despite CSOM being a disease with a high medical and socioeconomic burden, it often fails to get due attention because of insidious onset and chronic course.[7]CSOM is a common disease encountered in ENT practice, and proper evaluation and treatment can prevent the morbidity due to its complications. This study was conducted to know the clinical profile of patients with CSOM visiting Hospital.

Material and Methods

It was a cross sectional study of 50 patients with CSOM of all age groups and both sexes, attending the Out Patient Department and those admitted in Otorhinolaryngology wards. Patients were selected randomly for the study.

Inclusion criteria:

All cases of middle ear discharge for more than 3 months.

Exclusion criteria:

Condition which mimic CSOM like Otitis externa Acute suppurative otitis media.

The relevant data were collected with regard to age and sex distribution, type of CSOM, laterality, type of discharge, associated complaints, duration between incident and presentation, clinical presentation, radiological findings, management, and complications. X-ray mastoid bilateral Schuller's view and culture and sensitivity of discharge were carried out in selected cases.

Results

Table 1: Age wise distribution of CSOM subjects.

Age group (years)	Frequency n=50	Percentage
10-20	10	20 %
21-30	12	24 %
31-40	15	30 %
41-50	06	12 %
51-60	07	14 %

Table 2: Etiology of CSOM

Etiology	Frequency n=50	Percentage	
Infection	31	62 %	
Injury	10	20 %	
Residual	04	08 %	
Reperforation	05	10 %	

ISSN: 0975-3583, 0976-2833 VOL 14, ISSUE 06, 2023

Table 3: Clinical features of CSOM

Clinical features	Frequency n=50	Percentage
Ear discharge	41	82 %
Hearing loss	22	44 %
Vertigo	09	18 %
Pain in Ear	32	64 %
Tinnitus	07	14 %

Table 4: Quality of Ear discharge

Quality of Ear discharge	Frequency n=50	Percentage
Mucopurulent	24	48 %
Mucoid	15	30 %
Purulent	11	22 %

Table 5: Size of perforated Tympanic membrane

Size	Frequency n=50	Percentage
Small	10	20 %
Medium	11	22 %
Large	29	58 %

Discussion

Chronic otitis media is a global disease, seen in all continents of the world, but is most commonly seen in developing countries.[8]Chronic otitis media is a permanent abnormality on tympanic membrane following a long-standing middle ear infection emanating from previous acute suppurative otitis media (ASOM), otitis media with effusion, or negative pressure to the middle ear.[9] It is one of the common causes of hearing impairment in our country. CSOM is a disease of poor socioeconomic status and mainly affects children. In our study 30 % of patients were in age group og 31-40 years. Infection was most common cause of CSOM. 80 % patients had Ear discharge. 44 % had hearing loss. 64 % had pain in ear. 48 % patients had Mucopurulent ear discharge and 22 patients % had Purulent ear discharge . In 58 % patients Size of perforated Tympanic membrane was large. Recurrent ear infection will cause hearing impairment over the years as a result of mucosal changes in the windows and ossicles. The changes may stiffen the windows and ossicles and may lead to the disruption of ossicular chain. The hearing loss associated with the perforation is directly proportional to the size of the perforation. The site of the perforation does not have consistent effect on hearing loss. Proper management of COM is significant because it is an important cause of middle ear disease. After complete history, thorough clinical examination, the disease is diagnosed. The persistent infection and resultant inflammatory responses are tackled with effective pharmacotherapy.[10,11,12]

Conclusion

CSOM is a preventable cause of hearing impairment. Early diagnosis and management can prove to be effective in reducing socioeconomic burden and prevention of deafness. Thus, it is important to spread awareness among people for discharging ear for its early diagnosis and management. In present study 30 % of patients were in age group og 31-40 years. Infection was most common cause of CSOM. 80 % patients had Ear discharge. 44 % had hearing loss. 64 % had pain in ear. 48 % patients had Mucopurulent ear discharge and 22 patients % had

ISSN: 0975-3583, 0976-2833 VOL 14, ISSUE 06, 2023

Purulent ear discharge . In 58 % patients Size of perforated Tympanic membrane was large. Early diagnosis leads to early management.

References

- 1. Gopen Q.Pathology and clinical course of inflammatory disease of the middle ear.In:Gulya AJ, Minor LB, Poe SB, editors.Glasscock –Shambaugh Surgery of the ear.6th ed.Connecticut, USA, People's Medical Publishing House. 2010
- 2. AcuinJM . Chronic suppurative otitis media: a disease waiting for solutions. Comm Ear Hearing H. 2007; 4(6): 17-19.
- 3. Lasisi AO, Sulaiman OA, Afolabi OA. Socioeconomic status and hearing loss in chronic suppurative otitis media in Nigeria. Ann Trop Paediatr. 2007;27(4): 291-6.
- 4. Okafor BC. The chronic discharging ear in Nigeria. J Laryngol Otol1984;98(2):113-9.
- 5. Gupta R, Mittal M. A study on clinical and epidemiological profile of chronic suppurative otitis media (CSOM) at a tertiary care center. Int J Med Sci Public Health 2016;5:1021-1024
- 6. http://www.who.int/pbd/publications/Chronicsuppurativeotitis_media.pdf. Accessed on 26 July 2018.
- 7. Manche SK, Jangala M, Koralla RM, et al. Prevalence of otitis media and its hearing loss in children of South Indian population. 17th International Congress on Infectious Diseases. Int J Infect Dis 2016;45S:1–477. DOI: 10.1016/j.ijid.2016.02.723.
- 8. Wakode PT, Joshi SV, Gawarle SH. Chronic suppurative otitis media in school going children.Indian J Otolaryngol Head Neck Surg 2006;58(2):152-155
- 9. Browning GG, Merchant SN, Kelly R, Swan IR, Canter R, McKerow WS. Chronic otitis media, Chapter 237. In: *Scott Brown's Otolaryngology*, 7th edn, Volume 3. Kerr AG (Ed). London: Arnold 2008. pp 3395–445.
- 10. Kenna MA, Bluestone CD, Reilly, Lusk RP. Medical management of Chronic Suppurative Otitis Media without Cholesteatoma. Laryngoscope. 1986;96:146.
- 11. John DG, Carlin WV, Lesser TH, Carrik DG, Fielder C. tympanoplasty surgery and prophylactic antibiotics: surgical results. Clin Otolaryngol Allied Sci. 1988;13:205-7.
- 12. Muqtadir F, Rahul S. A study of clinical profile of patients with CSOM attending tertiary care hospital. Int J Otorhinolaryngol Head Neck Surg 2018;4:68-70.