

CHRONIC SUPPURATIVE OTITIS MEDIA (CSOM) – A STUDY IN TERTIARY CARE HOSPITAL

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Abstract

Background : The commonest disease faced worldwide is Chronic suppurative otitis media (CSOM). It often causes hearing loss which is easily preventable and treatable.

Material and Method: The study was conducted on 110 cases of CSOM who approached Pacific Medical College and hospital, Udaipur from February 2019 to February 2020.

Results: Males were predominant. Most patients 45(36.59 %) belong to the age group of 10–20 years. A large number of patients consulted ENT specialist after consultation with general physicians. Vast majority of population came from country side. Unilateral CSOM was most common. Tubotympanic CSOM is more common as compared to Atticoantral variety. The most common presenting complaint was discharge from ear followed by hearing loss.

Conclusion: In India a lot of patients present with CSOM but the assessment of problem on time and adequate management by motivating patient for treatment is necessary.

Keywords: Atticoantral .Bilateral. Chronic suppurative otitis media (CSOM). Tubotympanic .

Introduction

Chronic suppurative otitis media (CSOM) is defined as a persistent infection of the middle ear with a perforated tympanic membrane and draining exudate for more than 6 weeks [1] Despite the many advances in health care and surgical practices globally, the impact of CSOM is overwhelming and often more noticeable in the developing countries (2). Incidence of this disease is higher in developing countries especially among lower socioeconomic society because of malnutrition, overcrowding, poor hygiene, inadequate health care, and recurrent upper respiratory tract infection[3]. Almost all age groups can be affected in India. The poor and inadequate management of CSOM and antimicrobial resistance are big hinderance in management. CSOM is predominantly caused by *Pseudomonas aeruginosa*, *Escherichia coli*, *S. aureus*, *Streptococcus pyogenes*, *Proteus mirabilis*, *Klebsiella* species among aerobic bacteria. However, *Bacteroides*, *Pepto streptococcus*, *Propionibacterium* are common anaerobic bacteria (4, 5).

The classification of CSOM divides the disease into tubotympanic also known as mucosal type and atticoantral also known as squamosal type. The attic antral variety is more dreadful as it can present with various intracranial complication if left untreated. Hence timely management of disease is must.

The aims of managing the chronic discharging ear are early detection and timely, appropriate intervention to eradicate the disease permanently or to reduce its effects (i.e., ear

discharge, hearing loss, and other complications) if eradication is not possible (6).

Materials and Method:

The Present Study was done on 110 Patients of CSOM who presented to the Pacific Medical College and hospital, Udaipur from February 2019 to February 2020.

The detailed history of patient was taken followed by thorough clinical examination. The patients were enquired for all the demographic details, their presenting complaints, duration of disease and associated symptoms. The adequate radiological examination in the form of plain skiagrams and CT scan temporal bone wherever required was done .

Results:

The disease mainly affected young age group individuals as most of the participants belong to 11–20 years 40 while least common age group in our study was >50. The population of male was most affected i.e. 70(63.63%) as compared to females 40 (36.37 %). The students 51 (46.36 %) were found to have more CSOM as compared to other sectors.

Most of the patients i.e. 92 visited to an ENT specialist for the first time.

Tubotympanic type was the main type of CSOM 95 (86.43%) followed by 15 (13.63 %) atticoantral type.

Mucopurulent discharge was seen in 75 (68.18 %) of the cases followed by purulent discharge 35(31.8 %) cases

Left ear was found to be affected most 50 (45.45%) followed by right ear 35 (31.8%) while bilateral disease was seen in only 25 (22.7 %) cases.

As per size of perforation, medium sized perforation was most common 41 followed by large 35, small 15, attic 9; subtotal 7 and total 3.

Discussion:

Chronic suppurative otitis media often leads to conductive hearing loss and constitutes a risk factor for permanent sensorineural hearing loss because of inner ear injury as well

as intracranial complications(7). All age groups may be affected but younger age group was more susceptible. In this study, we found that disease mainly affected young age group. Chronic suppurative otitis media (CSOM) is a common condition affecting ears and affects more children than adults [8] although the disease may affect a child and persist into adulthood if left untreated [9].

Males were found to be most commonly affected. The aim of treatment of disease is to eradicate the disease and restore hearing mechanism. Also better cure of the disease brings more of patients to hospitals.

Table 1: Age-wise distribution of patients

Age	No.	Percentage
0-10	11	10
11-20	42	38.18
21-30	23	20.9
31-40	17	15.45
41-50	12	10.9
>50	5	4.52
Total	110	100

Table 3: Distribution of patients according to Type of CSOM

Rural/urban	No. of patients	%
Tubotympanic	95	86.43
Atticoantral	15	13.63
Total		100

The most common age group was between 11-20 years which matches with previous studies. In the present study, the commonest age group was 11-20 years.[10] In the paediatric age group is affected more because of increased infections of respiratory tract and the Eustachian tube is more horizontal and flaccid increasing the susceptibility of infections.

The consultation in our ENT OPD was for the first time for most of the patients as they have been consulting local general practitioners for long time without bothering to visit specialists.

Poor living conditions, over crowding, poor hygiene, and nutrition have been suggested as a basis for the widespread prevalence of CSOM in developing countries.[11] A lot of factors play important role in CSOM such as immune status, virulence of organism, allergic status and associated diseases. Tubotympanic type was the commonest as compared to atticoantral variety of CSOM. This is in accordance with previous studies.[12] Tubotympanic Mucosal CSOM is found to be more prevalent than squamosal CSOM. Copious mucopurulent otorrhea is usually a feature of active mucosal CSOM, whereas scanty, foul-smelling, and sometimes sanguineous varieties are seen in active squamosal CSOM (cholesteatoma).[13] The

hearing loss and discharge from ear are important symptoms for consulting otorhinolaryngologist for most of the patients. Bilateral cases are less common in unilateral cases among which left side is more common than right. The management of ear symptoms and complications can be done if treatment is given on time. Potential loss of hearing as a result of otitis media (OM) has important consequences on the development of speech and cognitive abilities, including academic performance of children.[11] The untreated or inadequately treated ASOM may lead to CSOM. CSOM is multifactorial with wide variety of treatment and investigations.

The goals of management of CSOM are twofold: disease eradication and closures of the tympanic membrane perforation. The treatment of CSOM could be nonsurgical, surgical, or combined modalities [14,15].

Conclusion:

CSOM can be prevented if adequately treated. Hence awareness should be spread to make people understand the need of hour that is to seek for early medical and surgical intervention and not waiting for complications to occur.

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