ASSESSMENT OF DEMOGRAPHIC FACTORS AND CLINICAL PRESENTATION OF CHRONIC SUPPURATIVE OTITIS MEDIA CASES IN TERTIARY HEALTH CARE CENTER CATERING TRIBAL POPULATION IN MAHARASHTRA

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ABSTRACT

Background: Otitis media (OM) refers to a group of complex infectious and inflammatory diseases affecting the middle ear. It is a common public health problem worldwide and a major cause of hearing impairment among children in developing countries. In the developing countries, there is differential prevalence among the different socioeconomic strata of the community. The objective of the study was to assess and compare demographic characteristics and modes of presentation of CSOM among tribal population and to estimate association of CSOM with hearing impairment. Methods: 80 patients with chronic suppurative otitis media who attended the ENT out patient department of a tertiary healthcare institute after taking consent were selected for the study using universal sampling technique, between January 2016 to April 2016. Results: Out of all enrolled study participants with CSOM, 60% were females and 40% were males. 40 had central perforation, 25 had subtotal perforation. Most of the cases of CSOM presented with symptoms lasting for 0-5 years (most common being 2-5 years followed by 0-2 years). Conclusions: Most of the cases from the present study belong to age group of 10-30 years. This finding shows its inclination towards younger age group. Longer duration of symptoms shows degree of ignorance towards the disease. Causes of delay in attending health facilities may be due to various socio-economic factors influencing health of the tribal community, limited health resources available for difficult to reach population.

KEYWORDS: CSOM, tribal population, Maharashtra, low socio-economic status.

INTRODUCTION

Otitis media (OM) refers to a group of complex infectious and inflammatory diseases affecting the middle ear.[1] OM has been broadly classified into two main types, acute and chronic. Despite appropriate antibiotic therapy, AOM may progress to chronic suppurative OM (CSOM) characterized by persistent drainage from the middle ear associated with a perforated ear drum.[2] Hearing impairment is one of the most common sequelae of CSOM.[3] Chronic Suppurative Otitis Media (CSOM) is most common middle ear disease that is encountered in daily practice. It is a common public health problem worldwide and a major cause of hearing impairment among children in developing countries.[4] Incidence of this disease is the higher in developing countries, especially among the lower socioeconomic society because of malnutrition, overcrowding, poor hygiene, inadequate health care, and recurrent upper respiratory tract infection.[5] In the developing countries, there is differential prevalence among the different socioeconomic strata of the community.[6] The early diagnosis and management can prove to be effective, in reducing socioeconomic burden and prevention of deafness.[7] The objective of the study was to assess and compare demographic characteristics and modes of presentation of CSOM among tribal population and to estimate association of CSOM with hearing impairment.

MATERIALS AND METHODS

Aims & Objectives: To study various modes of presentations, demographical characteristics and potential risk factors associated with cases of CSOM in tertiary health care center catering tribal region in Maharashtra.

Methods: 80 patients with chronic suppurative otitis media who attended the ENT out patient department of a tertiary healthcare institute after taking consent were selected for the study using universal sampling technique, between January 2016 to April 2016.

Patient evaluation- Cases selected for the study were subjected to detailed history taking, clinical examination, Otoscopic examination, and laboratory evaluation. Hearing evaluation was done by using tuning fork tests.
(Rinne, Weber’s and absolute bone conduction test). The data was compiled and tabulated using MS Excel 20.0 software, the data was analyzed statistically using the paired t test.

RESULTS
The present study was conducted on 80 patients, aged between 15 to 60 years, who underwent ear surgery for CSOM at a tertiary health care center, from January 2016 to April 2016. Out of them, 48 (60%) were females and 32 (40%) were males (Figure 2). Half of the cases were in the age group of 21-30 years (Figure 2). Out of 80 participants, 40 had central perforation, 25 had subtotal perforation, 7 had total perforation, 5 had Attic retraction pocket and 3 with intact membrane (Table 1). Most of the cases of CSOM presented with symptoms lasting for 0-5 years (most common being 2-5 years followed by 0-2 years). In management of the cases, 24 patients underwent tympanoplasty, 40 patients underwent cortical mastoidectomy with tympanoplasty and rest 16 patients underwent MRM with tympanoplasty (Table 2).

DISCUSSION
The present study was carried out in ENT department in tertiary health care center, from January 2016 to April 2016 on 80 patients, aged between 15 to 60 years. Demographical characteristics of the cases were studied, CSOM cases were found more among women (60% of total cases). Garud S studied prevalence of CSOM among tribal students, they found more prevalence among boys.8 Most of the cases from the present study belong to age group of 10-30 years. This finding shows its inclination towards younger age group. Most of the cases of CSOM presented with symptoms lasting for 0-5 years (most common being 2-5 years followed by 0-2 years). Such a longer duration of symptoms shows degree of ignorance towards the disease. Causes of delay in attending health facilities may be due to various socio-economic factors influencing health of the tribal community, limited health resources available for difficult to reach population like tribal population, hilly areas etc. The most common presenting sign of CSOM was found to be central perforation in tympanic membrane followed by subtotal perforation. Garud S found tubotympanic CSOM in 87% followed by atticotemporal type among younger age group9, however our study showed various detailed modes of presentation i.e. types of perforation in tympanic membrane. Central perforation was found to be commonest mode of presentation in CSOM in the present study followed by Subtotal perforation. Majority of cases from the present study were managed by Cortical Mastoidectomy with Tympanoplasty followed by tympanoplasty alone.

CONCLUSIONS
The present study which was done among tribal population to study various demographic factors and modes of presentations of CSOM cases. Due to compromised socio-economic status and illiteracy (more among women), cases of CSOM attends the health facilities late, which is responsible for increased prevalence of CSOM. Awareness about health conditions was found to be lacking among the tribal community.

RECOMMENDITIONS
1. Health education activities in order to make communities aware regarding early diagnosis and treatment of Ear disorders.
2. There is a need to develop various diagnostic and treatment facilities based on local needs of the tribal communities as their social, behavioral factors, customs and beliefs are different.

REFERENCES