Original Article

Prevalence of chronic Suppurative Otitis media at ENT inpatient department of a tertiary care hospital: A descriptive study

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Abstract

Introduction: CSOM is a word wide disease especially in the developing areas of the world. In developed Western countries, it is vanishing since operations for chronic otitis media seem to have decreased markedly over the past few decades ALHO *et al*. (1997). The prevalence rate of hearing impairment in our latest study is 13%, (125) with CSOM. The prevalence was found to be slightly higher in male children than female. The rate was found to be higher among children from the Southern and Eastern Province of the country. This truly reflects the poor social, economic conditions of this population, the poor health care facilities, public awareness, poor water supply and sanitation. **Aims and Objectives:** To study Prevalence of Chronic Suppurative Otitis Media at ENT Inpatient Department of a Tertiary Care Hospital **Methodology:** This was a Hospital Based, Cross-sectional study at Tertiary care hospital during the year Jan 2014 to Jan 2015, during one year period. All the patients admitted to ENT ward and Diagnosed as Chronic Suppurative Otitis media was studied for one year period. Out of the total 510 during one year 64 were with CSOM found admitted to ward during this year. All the necessary data and associated conditions was collected using, pretested, semi-structured questionnaire. **Result:** over all hospital prevalence of CSOM was 7.91%. Most of the CSOM patients were from Age group 21-30 (25.00%); followed by 31-40 18.75%; 11-20 yrs. (17.19%), <10 10.94%; 41-50 (10.93%); 51-60 (9.37%); 61-70 (4.68%). Proportion of Male was more (59.37%)) as compared to Females i.e. (40.62%) Most common associated condition with CSOM was Frequent ARI infections 80%; Low Socio Economic Status 75%; Unhygienic practices 74%; Rural 70%; H/o Exposure to Indoor pollution 65%; Overcrowding present 56%. **Conclusion:** most common associated conditions in our study found to be Frequent ARI infections 80%; Low Socio Economic Status; Unhygienic practices; H/o Exposure to Indoor pollution; Overcrowding present. So all these factors should be reduced to prevent CSOM infection.

Keyword: CSOM (Chronic suppurative Otitis Media), ARI (Acute Respiratory Tract Infections), Overcrowding.

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INTRODUCTION

CSOM is a word wide disease especially in the developing areas of the world. In developed Western countries, it is vanishing since operations for chronic otitis media seem to have decreased markedly over the past few decades ALHO *et al*.(1997)[1]. The prevalence rate of hearing impairment in our latest study is 13%, (125) with CSOM. The prevalence was found to be slightly higher in male children than female. The rate was found to be higher among children from the Southern and Eastern Province of the country. This truly reflects the poor social, economic conditions of this population, the poor health care facilities, public awareness, poor water supply and sanitation. Bluestone (1997)[2]. Reported the various risk factors responsible for the occurrence of the disease such as overcrowding, poor hygiene and nutrition, inadequate or unavailable health care, high rate of nasopharyngeal colonization with pathogenic bacteria and

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passive smoking. Otitis media is known to be one of the most common childhood infections 3and a leading reason for antibiotic prescriptions in the developed world[4]. Chronic suppurativeotitis media is a disease condition characterized by persistent perforation of tympanic membrane with recurrent or persistent muco-purulent otorrhea[5].The duration of the otorhoea has been a subject of controversy among otorlaryngologist with various definitions ranging from six weeks to three months from various studies[6,7]. In this present study 8 weeks duration has been used as the definition of CSOM in line with the definition in standard paediatric text[8].

AIMS AND OBJECTIVE

To study Prevalence of Chronic Suppurative Otitis Media at ENT Inpatient Department of a Tertiary Care Hospital

MATERIAL AND METHODS

This was a Hospital Based, Cross-sectional study at Tertiary care hospital during the year Jan 2014 to Jan 2015, during one year period. All the patients admitted to ENT ward and Diagnosed as Chronic Suppurative Otitis media was studied for one year period. Out of the total 510 during one year 64 were with CSOM found admitted to ward during this year. All the necessary data and associated conditions was collected using, pretested, semi-structured questionnaire.

RESULT

Out of the total 510 In Patient Department patient Total CSOM patients were 64 so hospital prevalence was 7.91%

Table 1: Age wise Distribution of the CSOM patients

Age group	No. (%)	Percentage
<10	7	10.94%
11-20	11	17.19%
21-30	16	25.00%
31-40	12	18.75%
41-50	7	10.93%
51-60	6	9.37%
61-70	3	4.68%
>70	2	3.12%
Total	**64**	**100%**

Most of the CSOM patients were from Age group21-30 (25.00%); followed by 31-4018.75%; 11-20 yrs. (17.19%), <1010.94%; 41-50 (10.93%); 51-60 (9.37%); 61-70 (4.68%).

Table 2: Sex Wise distribution of the **ENT** patients

Sex	No (%)
Male	38.00(59.37%)
Female	26.00(
Total	**64.00(100%)**

Proportion of Male was more (59.37%)) as compared to Females i.e. (40.62%)

Table 3: Distribution of the Patients as per associated Factors

Associated Factors	No.	Percentage
Frequent ARI infections	51	80%
Low Socio Economic Status	48	75%
Unhygienic practices	47	74%
Rural	45	70%
H/o Exposure to Indoor pollution	42	65%
Overcrowding present	36	56%
Post measles infection	6	10%

Most common associated condition with CSOM was Frequent ARI infections 80%; Low Socio Economic Status 75%; Unhygienic practices 74%; Rural 70%; H/o Exposure to Indoor pollution 65%; Overcrowding present 56%.

DISCUSSION

In our study so hospital prevalence was 7.91%.This is in not confirmative with; the prevalence of CSOM in this study was 0.51%.This is comparable to the study by Okeowo[9] who had reported a prevalence of 0.6% among urban school children but less than other urban community studies reported by Oduntan[10], Okeowo[9] and Ogisi[11]. The lower prevalence in this study appears to be at variance with the view that hospital prevalence is higher than community prevalence. This may be due to smaller denominator in hospital studies compared to community studies though the absolute number of affected children may be greater in the community. In our study Most of the CSOM patients were from Age group21-30 (25.00%); followed by 31-40 18.75%; 11-20 yrs. (17.19%), <10 10.94%; 41-50 (10.93%); 51-60 (9.37%); 61-70 (4.68%). Proportion of Male was more (59.37%) as compared to Females i.e. (40.62%). Most common associated condition with CSOM was Frequent ARI infections 80%; Low Socio Economic Status 75%; Unhygienic practices 74%; Rural 70%; H/o Exposure to Indoor pollution 65%; Overcrowding present 56%.This in confirmative with O Olubanjo *et al*[13], Siraj M. Zakzouk[14]. In addition to this, all the parent of the subjects do their cooking with kerosene and wood in door which exposes the subjects to noxious agents from the biomass smoke. This is known to affect the respiratoryepithelium there by predisposing them to respiratory tractinfection and increasing the risk of otitis media[12].

CONCLUSION

Most common associated conditions in our study found to be Frequent ARI infections

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