

Prevalence of Chronic Otitis Media in School Going Children of Saidu Sharif, Swat

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Abstract

Objective: To assess prevalence of chronic otitis media in school going children of Saidu Sharif.

Materials and Methodology: This was a randomized control cross sectional study done on school students of various age group of Saidu Sharif Swat. Duration of study was from 1st January 2019 to 31st December 2019. Data was collected by using a questionnaire, followed by ear examination and various audiometric tests.

Results: A total of 184 children with age range from 7-18 were recruited in the study .101 children were males and 83 females. Out of total 184 ,36 children complained of hearing loss and 19 of any ear discharge. In 12 cases it was unilateral discharge and in seven from both ears, associated with foul smell in 17 cases, no smell was reported in two cases.

Conclusion: Early diagnosis and proper management may help to reduce the disease burden and prevent disabling hearing loss in children.

Keywords: Chronic otitis media, children, hearing loss .

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Introduction

Chronic otitis media is defined as a discharging ear with tympanic membrane perforation for more than two weeks.^{1,2} It is further classified into active and non active mucosal disease depending on behavior of middle ear mucosa. It is one of the preventable causes of deafness^{3,4}, in which most of the patients develop mild to moderate degree of conductive deafness affecting schooling, delayed speech and language development. A prevalence rate of 1-2% is considered low and 3-6% high by WHO.³ Otitis media is one of the frequent causes of childhood infections and hearing loss .The bacteria mostly responsible are streptococcus pneumonia, haemophilus influenza ,staphylococcus aureus and moraxella catarrhalis.⁵ About 20,000 have been reported die of complications due to chronic otitis media, with highest rate in children of less than 5 years age.⁶ A more than 1% prevalence of chronic otitis media in pediatric group in a community means that there is a preventable burden of the problem. Prevalence of 4% or more means a public health problem which needs immediate attention.¹ Though chronic otitis media is a disease of the whole world

but is more common in underdeveloped countries, including Pakistan. Overcrowding, poverty, illiteracy, poor nutrition are the main causes for the development of disease.^{7,8} Aim was to study the prevalence of chronic otitis media in school going children of the town.

Materials and Methods

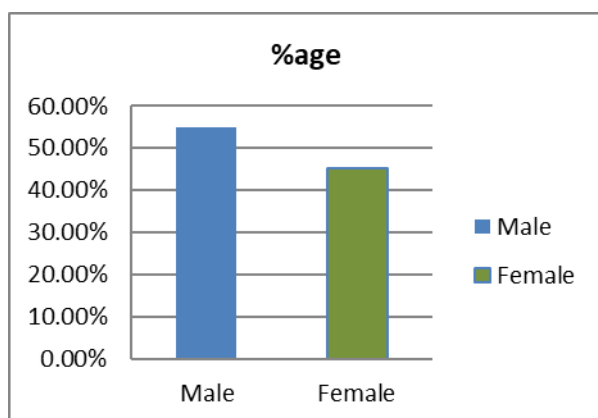
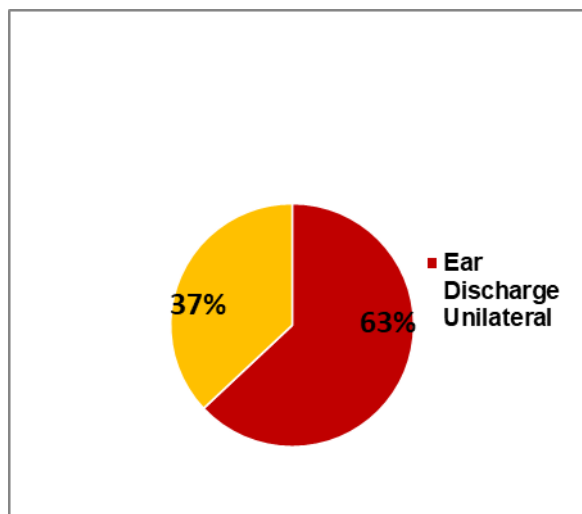
It was an observational cross sectional study carried out on school going children of Saidu Sharif, Swat. A total of 184 students entered the study. Sample had representation from all sections of age group. children with age range 7 -18 years were included in the study. Children above and below this age group were excluded from the study. Sampling technique was simple randomized. Duration of study was from 1st January 2019 to 31 December 2019. A questionnaire was made to collect data. Data was summated by hand counting technique.

Results

One hundred and eighty four children of different ages ranging from 7-17 with mean of 11.14 and std. deviation of 1.948 were included in the study. 54.9% were males and

Authorship Contribution: ¹⁻⁴Active participation in active methodology, Literature search & references.

45.1% females with a ratio of 1.2-1. Only 19.6% complained of some degree of hearing loss. Prevalence of chronic otitis media was noted in 10.3% of the cases. Ear discharge was associated in many cases . 63% of the discharging ears were unilateral and 37% bilateral. Foul smelling discharge was seen in 9.2% .



Discussion

Chronic otitis media is one of the common ear diseases especially in pediatric age group. Presentation of otitis media is variable ranging from silent otitis media to life threatening intracranial complications like meningitis, brain abscess etc. Chronic otitis media with or without complications is a major health problem. It is more common in poor people of developing countries. In our study 10.3% of the children had chronic otitis media. This prevalence is much higher than other studies .Prevalence of chronic otitis media in school children reported by Wakode PT et al, in India is 3.00%⁸ , while in a study by Zakzuk et al at saudian school children the prevalence was found to be 1.3%.⁷ Minja BM et al reported a prevalence of 2.6% in their study.⁹ The reasons for these differences from our study may be different geographical locations ,socioeconomic status ,environmental conditions, different age groups and diagnostic criteria .

OLOGE et al Reported a prevalence of 6% in school going children¹⁰ which is close to our study . Biswas et al found a prevalence of 12.4%¹¹ and Moris et al 15%.¹²

Male children 54.9% were more affected than females 45.1%. This is almost similar in study by Prakash adikari who reported 54% males and 46% females.¹³ Pervez et al reported male to female ratio of 48.9%:51.1% . Habit of swimming in dirty canal water may be responsible factor for discharging ears. Education status of the parents is also very much important for prevention of the disease. In our study 91.3% of the guardians were educated and 8.7% uneducated. Out of the 8.7%, 35.9% were mothers and 14.1% fathers. Pervez et al found that 60.2% of mothers in their study were illiterate.³ This shows that maternal education is more important for taking care of their children.

Conclusion

Prevalence of chronic otitis media, though preventable, is very high in school going children which may end up with serious complications. A school based ear care education can help in early diagnosis of chronic otitis media and reducing its complications. It can be a useful tool towards community oriented programme.

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