

Original article:

Study of demographic profile of otitis media cases at tertiary care hospital

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Abstract:

Introduction: Any condition which affects the proper function of the mucociliary system of the upper respiratory tract may predispose to development of MEE. There is a relationship between the presence of ME fluid and hearing impairment, though in younger children the HL is not always obvious.

Material and methods: This study was carried out in the Department of ENT, kakatiya medical college, Warangal. It was Prospective study was conducted during two years period. They are the patients attending the E.N.T. Department of Mahatma Gandhi Memorial Hospital and also patients referred from other departments in the same hospital. A total of 50 cases were studied.

Results and conclusion: The mean age of children was 8.48 years (standard deviation of 2.35 years), with a range of 5 years to 12 years. There was no difference in distribution of patients according to sex or different age categories.

Introduction:

Any condition which affects the proper function of the mucociliary system of the upper respiratory tract may predispose to development of MEE. There is a relationship between the presence of ME fluid and hearing impairment, though in younger children the HL is not always obvious. When covert it may present as speech, language or learning delay and sometimes as behavioural and educational problems. HL may be first detected on routine screening examination at 7-9 months, 3 years age or later at pre-school testing.^{1,2}

The diagnosis is otoscopic and confirmed by tympanometry. A proportion of OME resolves spontaneously or with the treatment of URTI. The failures require the surgical solution of ventilating tube and adenoidectomy². OME is the commonest cause of HL in an infant. It is a simple condition but, if left undiagnosed or untreated can lead to preventable long-term consequences.

Material and methods:

This study was carried out in the Department of ENT, kakatiya medical college, Warangal. It was Prospective study was conducted during two years period. They are the patients attending the E.N.T. Department of Mahatma Gandhi Memorial Hospital and also patients referred from other departments in the same hospital. A total of 50 cases were studied.

InclusionCriteria:

The patients who were diagnosed as otitis media with effusion and less than or equal to 12 years of age, included in the study.

Exclusion Criteria:

The patients who were diagnosed as other than otitis media with effusion and more than 12 years of age were excluded from the study.

Methods of Data Collection:

The Proforma was designed based on the objectives of the study. It was pretested and used after modification (enclosed in annexure). As per the enclosed Proforma, detailed history was taken followed by thorough ENT and systemic examination, and clinical diagnosis was made in support with the relevant investigations. Once the diagnosis was confirmed the data thus obtained was analysed with the aid of calculator and presented in the form of tables, figures, graphs and diagrams wherever necessary. The findings are discussed in the light of findings in other similar studies conducted elsewhere based on the objectives of the study in the foregoing chapters. As OME the fluid aspiration was done and sent for culture.

The data thus obtained was analysed with the aid of calculator and presented in the form of tables, figures, graphs and diagrams wherever necessary. The findings are discussed in the light of findings in other similar studies conducted elsewhere based on the objectives of the study in the foregoing chapters.

Results:

A prospective cohort study on children in the age group of 5 to 12 years, presenting with OME was done in the Department of ENT, Kakatiya medical college, Mahatma Gandhi Memorial Hospital over a period of 20 months. Fifty children satisfied the entry criteria and all parents consented for recruiting their children for the study.

All fifty children were available for follow up at 2 months and 6 months. Thus complete clinical, tympanometric and audiometric data were available in all children. The characteristics of study children are shown in Table 1.

Table 1. Distribution of patients according to age and sex

Age in years	Male No. of Pt.'s (%)	Female No. of Pt.'s (%)
5-6	10 (37.1)	4(17.4)
7-8	3(11.1)	9(39.1)
9-10	8(29.6)	5(21.7)
11-12	6(22.2)	5(21.7)
Total	27(54.0)	23(46.0)
Mean+/- SD	8.44 ± 2.59	8.52 ± 2.09

The mean age of children was 8.48 years (standard deviation of 2.35 years), with a range of 5 years to 12 years. There was no difference in distribution of patients according to sex or different age categories.

Table 2. Socioeconomic Distribution of Cases

Socioeconomic Status	No. of Patients	Percentage
Upper class	6	12
Middle class	9	18
Lower class	35	70
Total	50	100

Most of the cases i.e., 35 (70%) belonged to lower socioeconomic status and least i.e., 6 cases (12.00%) belonged to the upper class. 9 cases (18.00%) belonged to the middle class.

Discussion:

All the cases (100%) of OME ranged between 5 to 12 years .Majority of cases (70%) belonged to lower socioeconomic class. The most common clinical presentation was fullness of ear (70%). On otoscopic examination dull, lustreless and retracted tympanic membrane was seen most commonly (70% in left and 68% in right ear). Only half of the cases (50%) showed positive bacterial cultures of ME effusion, and *Streptococcus pneumoniae* (30%) was the most common organism isolated. All cases (100%) were put on medical line of treatment and regularly followed up. Some patients (16%) responded well, but most cases (84%) were the refractory cases and required different surgical modalities like adenotonsillectomy with grommet insertion (20%), adenoidectomy with grommet insertion (50%) and myringotomy with grommet insertion (14%).^{3, 4,5}Most cases (70%) on post-operative follow-up showed significant improvement. Expulsion of grommet (8%) and mucopurulent discharge (10%) were seen post-operatively in some cases.⁶

Conclusion:

The mean age of children was 8.48 years (standard deviation of 2.35 years), with a range of 5 years to 12 years. There was no difference in distribution of patients according to sex or different age categories.

References:

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Author Declaration: Source of support: Nil, Conflict of interest: Nil

Was informed consent obtained from the subjects involved in the study? YES

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DOI: 10.36848/IJBAMR/2020/26215.5599