

ORIGINAL RESEARCH

Assessment of incidence of ear, nose and throat disorders in children

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ABSTRACT

Background: Children frequently have respiratory tract symptoms, such as cold and cough, earaches, and sore throats, particularly during seasonal changes in the weather or during the rainy and winter months. The present study was conducted to assess incidence of ear, nose and throat disorders in children. **Materials & Methods:** 78 cases of ENT disorders in children of both genders were selected. Otoscopy for ear examination for diseases such as otitis media, ear perforation and ear discharge were done. In case of nasal examination, external, anterior rhinoscopy for nasal discharge, airway obstruction and infection were performed. Presence of any adenoid hypertrophy was looked for. Throat examination was performed for any sign of tonsillitis or pharyngitis. **Results:** Out of 128 patients, males were 75 and females were 53. The common ear disorders were ear wax in 8, CSOM in 12, OME in 11 and foreign body ear in 4 cases. Nose disorders were allergic rhinitis in 10, chronic sinusitis in 12, nasal polyp in 13, DNS in 7 and epistaxis in 3 cases. Throat disorders were tonsillitis in 22, cervical lymphadenitis in 14, adenoid hypertrophy in 7 and foreign body in 5 cases. The difference was significant ($P < 0.05$). **Conclusion:** The common ear disorders were ear wax, CSOM, OME and foreign body ear. Nose disorders were allergic rhinitis, chronic sinusitis, nasal polyp, DNS and epistaxis. Throat disorders were tonsillitis, cervical lymphadenitis, adenoid hypertrophy and foreign body.

Keywords: Children, ENT, epistaxis

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INTRODUCTION

One of the most frequent reasons for a doctor's appointment is an ENT issue, especially if the patient is a child. A sizeable fraction of the world's population is made up of children. India is the second most populated country in the world, with 35% of its people being children.¹ Children frequently have respiratory tract symptoms, such as cold and cough, earaches, and sore throats, particularly during seasonal changes in the weather or during the rainy and winter months.² For financial considerations, it is likely that the majority of the time, symptomatic treatment and alternative therapies are used at home for these conditions. In most cases, the youngsters are taken to the doctor when these symptoms worsen.³ School absenteeism due to ENT diseases is quite common in children from LMICs that significantly affect their learning and hence psychological development. Wider and horizontal eustachian tube is also one of the important reasons for increased ear infections in children leading to hearing impairment.⁴ Children are more likely than adults to

experience issues with their ears, nose, and throat, particularly with conditions like acute suppurative otitis media, acute tonsillitis, acute epiglottitis, laryngotracheobronchitis, and rhinitis, among others.⁵ Numerous reasons, including a broader and horizontal Eustachian tube, underdeveloped immunity, malnourishment, unhygienic environments and poor hygiene, overcrowding, a lower socioeconomic standing, etc., could be the cause of this.⁶ The present study was conducted to assess incidence of ear, nose and throat disorders in children.

MATERIALS & METHODS

The present study consisted of 78 cases of ENT disorders in children of both genders. Parents gave their written consent to participate in the study. Data such as name, age, gender, etc. was recorded. Clinical history and examination for common ENT complaints and disorders was also taken for all patients. Otoscopy for ear examination for diseases such as otitis media, ear perforation and ear discharge were done. In case of nasal examination, external,

anterior rhinoscopy for nasal discharge, airway obstruction and infection were performed Presence of any adenoid hypertrophy was looked for. Throat examination was performed for any sign of tonsillitis

or pharyngitis. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 128		
Gender	Male	Female
Number	75	53

Table I shows that out of 128 patients, males were 75 and females were 53.

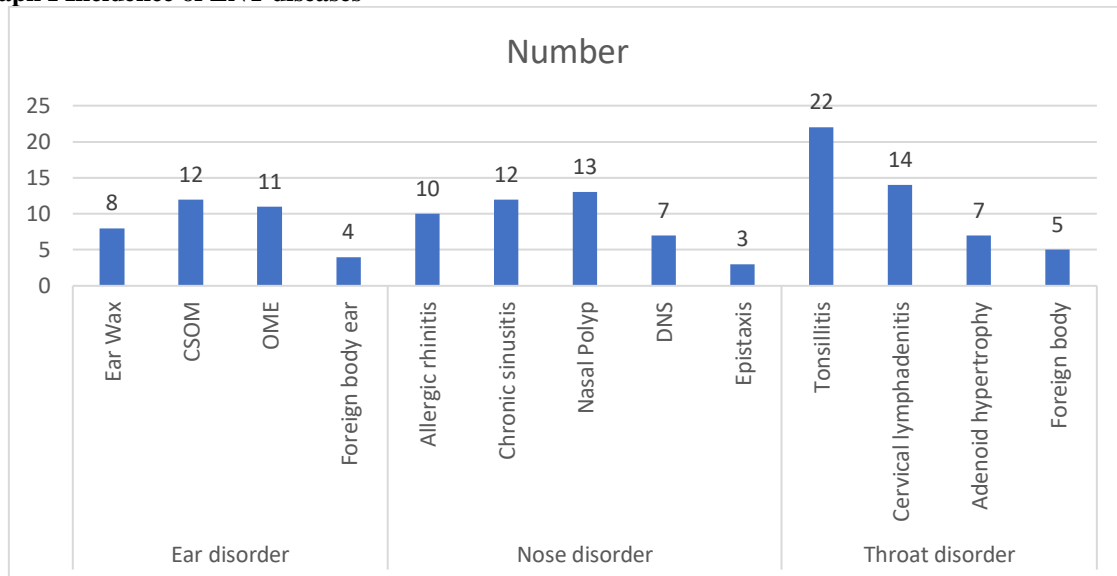
Table II Incidence of ENT diseases

Parameters	Variables	Number	P value
Ear disorder	Ear Wax	8	0.05
	CSOM	12	
	OME	11	
	Foreign body ear	4	
Nose disorder	Allergic rhinitis	10	0.14
	Chronic sinusitis	12	
	Nasal Polyp	13	
	DNS	7	
	Epistaxis	3	
Throat disorder	Tonsillitis	22	0.04
	Cervical lymphadenitis	14	
	Adenoid hypertrophy	7	
	Foreign body	5	

Table II, graph I show that common ear disorders were ear wax in 8, CSOM in 12, OME in 11 and foreign body ear in 4 cases. Nose disorders were allergic rhinitis in 10, chronic sinusitis in 12, nasal

polyp in 13, DNS in 7 and epistaxis in 3 cases. Throat disorders were tonsillitis in 22, cervical lymphadenitis in 14, adenoid hypertrophy in 7 and foreign body in 5 cases. The difference was significant (P< 0.05).

Graph I Incidence of ENT diseases



DISCUSSION

The incidence of ear, nose and throat disorders in children is increasing may be due to environmental factors involved in it. Lack of data makes it even more difficult to assess the situation.^{7,8} ENT diseases can be accurately diagnosed by taking good clinical history from children or from their parents.⁹ According to

WHO 42 million children is suffering from hearing disability, the most commonest was otitis media.¹⁰ The present study was conducted to assess incidence of ear, nose and throat disorders in children.

We found that out of 128 patients, males were 75 and females were 53. Surapaneni et al¹¹ enrolled 417 children between the ages of 0-15 with ENT

infections. 258 (61.9%) patients were females while there were 159 (38.1%) males. More than 45% cases who had disorders were concentrated in the 6-15 years age group. Almost 75% of the children were from lower socioeconomic status. Otitis media among the ear diseases, rhinitis in the nasal diseases and pharyngitis followed by tonsillitis in the diseases of the throat was found to be the most common.

We observed that the common ear disorders were ear wax in 8, CSOM in 12, OME in 11 and foreign body ear in 4 cases. Nose disorders were allergic rhinitis in 10, chronic sinusitis in 12, nasal polyp in 13, DNS in 7 and epistaxis in 3 cases. Throat disorders were tonsillitis in 22, cervical lymphadenitis in 14, adenoid hypertrophy in 7 and foreign body in 5 cases. Regmi et al¹² aimed to study the prevalence and seasonal effect of ENT disorder in children. Out of 14,126 patients visiting the ENT-OPD, 3,423 (24.23%) were children. The mean age of children having ENT disorders were 8.4±5.1, 10.6±4.6 and 10.7±4.7 years respectively with male-female ratio of 1.3:1. During all seasons 2,645 (77.3%) had ear problems, 328 (9.6%) nose disorders and 450 (13.14%) throat disorders. The percentage of children with ear disorders declined significantly with increase in age unlike those with nose and throat disorders (P< 0.001). Seasonal trend analysis showed that children had significantly higher number of ear disorders during summer and autumn seasons.

Fasunla et al¹³ found that there were 2641 (52.8%) males and 2360 (47.2%) females. Two thousand and fifty (41%) patients had age ≤15 years old. Sixty three percent of the patients were Christians, 37% were Muslims and less than 1% had other religions. There were more patients in lower occupational classes than those in the upper classes. The average number of patients with ear, nose and throat diseases managed per month was eighty-three. Patients with ear diseases were 3136 (62.7%), the nose diseases were 1153 (23.0%), the throat diseases were 479 (9.6%) and head/neck diseases were 233 (4.7%).

The limitation of the study is the small sample size.

CONCLUSION

Authors found that common ear disorders were ear wax, CSOM, OME and foreign body ear. Nose disorders were allergic rhinitis, chronic sinusitis, nasal polyp, DNS and epistaxis. Throat disorders were tonsillitis, cervical lymphadenitis, adenoid hypertrophy and foreign body.

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