

FREQUENCY OF DISEASES PRESENTING IN ENT OPD AT AYUB TEACHING HOSPITAL ABBOTTABAD

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Abstract: Introduction: Patient presents with ear, nose and throat diseases in ENT OPD to otolaryngologist/ENT specialist. ENT diseases are serious public health problems because of their universal distribution the morbidities which they cause due to inherent physiological function that take place in head and neck region. Objectives of our study were to know frequency of ENT diseases in patients presenting at ENT OPD at Ayub Teaching Hospital Abbottabad.

Methods: A cross sectional study was done in Ayub Teaching Hospital Abbottabad from December 2015. to August 2016. Patients presenting at ENT OPD of Ayub Teaching Hospital Abbottabad were selected for study. Data about their ENT problems and concerned information were collected from them through well structured questionnaire. Data after collection was entered and analysed using SPSS-16.

Results: The minimum age is 1 and maximum age is 80 years. Out of total 250 patients, 129 (51.6%) were males and 121 (48.4%) were females, majority of patients 181 (72.4%) were from Abbottabad and majority of patients 165 (66.0%) were poor. The most common cases in ENT OPD were bilateral ear wax 15.2% followed by acute otitis media 13.2% and allergic rhinitis 13.2%.

Conclusion: It is concluded from our research that most common problems of ENT disorders are bilateral ear wax, allergic rhinitis, acute otitis media, chronic suppurative otitis media and deviated nasal septum. The most common causes are infection, poor hygiene and poor nutrition.

Key words: Frequency, ENT diseases, Otitis media, ENT OPD patients of Ayub Teaching Hospital, Abbottabad.

INTRODUCTION

Patient presents with ear, nose and throat diseases in ENT OPD to otolaryngologist/ ENT specialist (1). The pattern of ENT diseases is quiet variable depend-

ing on age and group varying from community to community. They may be congenital or acquired in origin. Acquired diseases may be infectious, inflammatory, neurological and vascular or they may be due to some trauma. Complications occur in hearing, breathing, phonation, swallowing, speech, olfaction, taste and protection of lower respiratory tract (2).

In ENT OPD the most presenting ear diseases are ear infection, conductive hearing loss, otitis externa and chronic otitis media (3). The otitis media is the most common disease in young patient because of its more horizontal orientation in children than adults (4). In a survey done by WHO chronic suppurative otitis media (CSOM) was reported to be the most common cause of hearing loss in children in developing countries. Survey on prevalence of CSOM have shown the global burden of illness from CSOM involves 65-330 million individuals 60% of whom suffer from significant defect (5). In ear diseases oral medication response is excellent while surgical intervention is less frequently required (6).

Diseases of nose which presents the ENT OPD are nasal deformities, tumours, disease of nasal vestibule, nasal septum deviation, nasal polyps, rhinitis, epistaxis, etc. Causes of nasal diseases are trauma, nose surgery and infections. Complication that occurs due to nasal diseases are meningitis, cavernous sinus thrombosis and septal abscess (7). A common problem of nose affecting 60 million Africans each year is epistaxis. Most of its cases are minor and manageable but some presents as a life threatening problem. Common local causes are trauma, anatomical deformities and tumours. Cardiovascular diseases and hypertension are its systemic causes (8). Epistaxis is a common problem in children in Kiesselbach area due to local irritation in children (9). Epistaxis is initially treated by first aid measures but other times need some special measures to treat (10).

Most common throat diseases in outdoor patient department are sore throat, tonsillitis, pharyngitis and cancers. Causes of throat disease are usually a viral infection but other causes include allergies. Complication of throat diseases is acute rheumatic fever; acute glomerular nephritis and peritonsillar abscess formation (11). Second most common cancer of the respiratory tract is the laryngeal cancer. Risk factor for this type of cancer is cigarette smoking, alcohol consumption and may be human papilloma virus 16 and helicobacter pylori (12). Incidence of multiple primary tumours in head and neck region ranges from 10-35 percent (13).

In head and neck malignancies laryngeal cancer accounts approximately for 20% of all cases. Treatment for laryngeal include total laryngectomy (TL), alone or with neck dissection (ND), radiotherapy alone (RT), TL followed by RT and combined chemotherapy (14).

Children going to schools are more prone to ENT diseases because of cross infections. This chronic problem not only hampers developmental progress and school performance but also cause physical and emotional suffering (15). Foreign bodies in ear usually found in children below age of ten years it may be iatrogenic or accidental. Tracheobronchial foreign bodies are the major cause of mortality and morbidity in paediatric age group (16).

It has been concluded from a study carried out in India that smoking is the main cause of middle ear diseases in children and adults. Among adults hearing loss is more common with smoking (17).

According to a study done in Peshawar the incidence of common ENT diseases presenting in OPD are chronic tonsillitis 37%, CSOM 14%, rhinitis due to deviated nasal septum 67%.

A study done on prevalence of allergic rhinitis in Oman showed that 7% patients with nasal symptoms attended the ENT OPD (18). A study performed in France on allergic rhinitis and its affect on sleep showed that sleep impairment was significantly worse with allergic rhinitis. Everyday living is also impacted by allergic rhinitis due to lack of sleep (19). Studies showed that aeroallergens are the primary triggers for respiratory tract diseases (20).

Asthma is a worldwide common disease in children and adults (21). According to a report of WHO asthma a life threatening disease roughly effect 100 and 150 million people around the globe and over 180,000 deaths occur from this condition annually. About 8% of Swiss population suffers from asthma. There are about 3 million asthmatics in Japan and 4 million in Germany. A rough estimate in India indicates a prevalence of between 10% and 15% in 5-11 year old children (22). The prevalence of asthma in Pakistan is increasing day by day with an annual increase of 5% of which 20% to 30% are children between 13 and 15 years of age. Nearly 20 mil-

lion people about 12% of Pakistani adult population are suffering from disease (23).

According to a study done at Military Hospital Attockotomycosis (a fungal ear infection common in tropical countries) is a common condition often seen in ENT OPD and in this study its prevalence is about 7% among patients who presented with sign and symptoms of otitis media. Its various predisposing factors are humid climate, presence cerumen, instrumentation of ear and increase use of antibiotics (24). Otitis media with effusion is also a common medical in Indian children and its prevalence has been quoted 16.6% in children of age 5 to 7 (25). According to a report of WHO 5% of world population 360 million people has disabling hearing loss (a person who is not able to hear as well as someone with normal hearing _hearing threshold of 20 decibel or below in both ears is to have hearing loss) (26).

A study done on symptoms of ENT diseases showed that headache was the main symptom in patients presented in ENT OPD (27).

A study done on ear ,nose and throat diseases showed that common ear, nose and throat disorders were seen in patients aged < 15 years are otitis media, obstructive adenoids and foreign bodies in the ear whereas hearing loss, rhino sinusitis and tumours were the common disorder of ENT in patient aged 16 years and above (28).

Chronic rhino sinusitis (CRS) a clinical syndrome characterized by mucosal infection of nose and paranasal sinuses is one of the most prevalent chronic diseases worldwide. It is the second most chronic condition in United States, affecting one in seven American adults (29). In USA prevalence of sinusitis is estimated to be 14% of global population. Patients with particular disease more often develop sinusitis such as 25-30% of allergic patients, 43% of asthmatic patients, 37% of patients with transplants and 54-68% of patients with AIDS (30). Studies from tertiary care centres indicate a high prevalence of fungal rhino sinusitis in India. This was found in 70% young males in 10-39 years age group from rural India (31).

MATERIAL AND METHODS

This was a cross sectional descriptive type of study at Ayub Teaching Hospital Abbottabad. The study was done over a period from December 2015 to June 2016. The sample size was 250. Non Probability convenient sampling. Patients with different ENT diseases presenting at ENT OPD of Ayub Teaching hospital Abbottabad were included. All patients who are in emergency condition were excluded. Data was collected using a structural questionnaire after pretesting. The data after collection was entered and analyzed using statistical software SPSS-16. Mean and standard deviation were calculated

for quantitative variables like age, monthly family incomes etc. while frequencies and percentages were calculated for categorical variables like gender, socioeconomic etc. Results were displayed as tables and graphs.

RESULTS

Table 1. Gender of patients

	Frequency	Percentage (%)
Male	129	51.6%
Female	121	48.4%
Total	250	100%

Table 1 shows that out of total 250 patients, 129 (51.6%) were males and 121 (48.4%) were females.

Table 2. Socioeconomic status

	Frequency	Percent
Poor	165	66.0%
Middle	72	28.8%
Upper	13	5.2%
Total	250	100.0%

Table 2 shows that majority 165(66%) of patients were poor, 72 (28.8%) belonged to middle class and 13 (5.2%) were from upper class.

Occupation

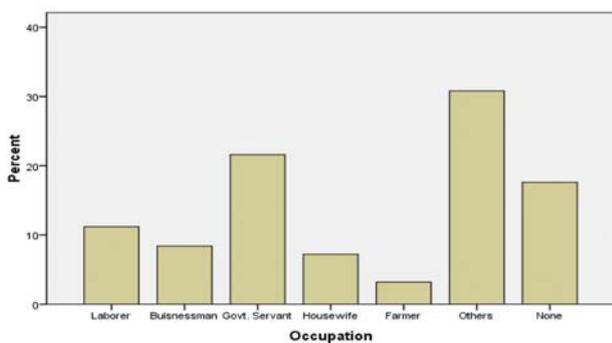


Figure 1. Occupation

Figure 1 shows that out of 250 patients, 28 (11.2%) were laborer, 21 (8.4%) were businessman, 54 (21.6%) were government servant, 18 (7.2%) were housewife, 8 (3.2%) were farmers, 77 (30.8%) had other jobs and 44 (17.6%) had no jobs.

Table 3 shows that out of total 250 patients, 33 (13.2%) were suffering from acute otitis media, 21 (8.4%) had acute pharyngitis, 11 (4.4%) had acute sinusitis, 13 (5.2%) had acute tonsillitis, 33 (13.2%) had allergic rhinitis, 38 (15.2%) had bilateral ear wax, 10 (4.0%) had chronic pharyngitis, 27 (10.8%) had chronic suppurative otitis media, 26 (10.4%) had chronic tonsillitis, 20 (8.0%) had deviated nasal septum, 7 (2.8%) had epistaxis and 11 (4.4%) were suffering from otitis externa.

Table 3. Diagnosis

	Frequency	Percent
Acute otitis media	33	13.2%
Acute pharyngitis	21	8.4%
Acute sinusitis	11	4.4%
Acute tonsillitis	13	5.2%
Allergic rhinitis	33	13.2%
Bilateral ear wax	38	15.2%
Chronic pharyngitis	10	4.0%
Chronic suppurative otitis media	27	10.8%
Chronic tonsillitis	26	10.4%
Deviated nasal septum	20	8.0%
Epistaxis	7	2.8%
Otitis externa	11	4.4%
Total	250	100.0%

Duration of illness

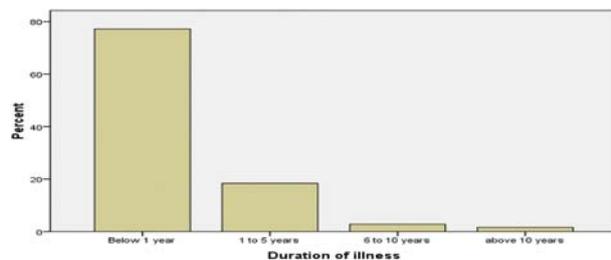


Figure 2. Duration of illness

Figure 2 shows that out of total 250 patients, 193 (77.2%) patients had duration of illness below 1 year, 46 (18.4%) had 1 to 5 years, 7 (2.8%) had 6 to 10 years and 4 (1.6%) had above 10 years duration of illness.

Table 4. Nature of visit

Nature of visit	Frequency	Percent
First	117	46.8
Follow up	133	53.2
Total	250	100.0

Table 4 shows that out of total 250 patients, 117 (46.8%) patients had first visit to hospital and 133 (53.2%) patients were follow up.

Any treatment taken before

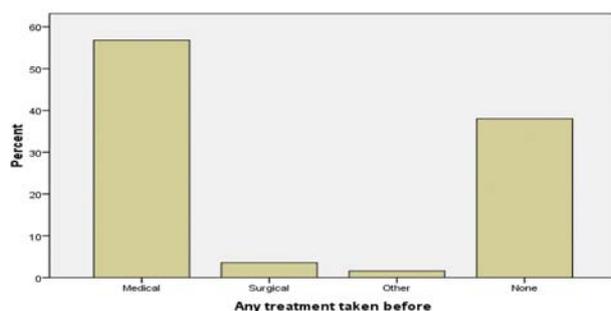


Figure 3. Any treatment taken before

Figure 3 shows that out of total 250 patients, 142 (56.8%) had taken medical treatment, 9 (3.6%) had taken surgical treatment, 4 (1.6%) had taken other treatment and 95 (38.0%) had taken no treatment before.

DISCUSSION

The pattern of ENT disease is quiet variable depending on age & group varying from community to community. A prospective cross sectional study of all consecutive patients coming to otolaryngology clinic in Oman was done on allergic Rhinitis and associated co morbidities. In this study allergic Rhinitis was noted in 48% of patients. According to our study out of 250 cases 33 patients (13.2%) were of allergic rhinitis. The difference in result is due to sample size which is small in our study (18).

A study done in India on the Prevalence of preventable ear disorders in primary school children (aged 5 to 12 years) through pro-forma questionnaire in 15718 primary school children. Most common ENT disorders seen in these children were Ear wax in 7.93%, chronic otitis media in 4.79% & 3.66% suffered from otitis media with effusion. Acute otitis media was detected in 0.65% children and foreign bodies were found in 0.34%. According to our study, out of 250 patients of bilateral ear wax are (15.2% , chronic otitis media 10.8% and acute otitis media 13.2%. Difference in results is due to sample size and age groups (32).

In our study patient occupational classes showed that there were more patients in lower occupational classes than in those in upper classes. Same results are showed by a study done in England by SL Isaac et al (33). A prospective study carried out at ENT department of KMC Peshawar Pakistan from April 2011 to May 2012 a total of 32800 patients showed the distribution of diseases systemically that is ear diseases were 47%, 36% Nasal complaints and 17% Laryngopharyngeal. In our study ear diseases are 43.6%. Nasal complaints are 28% and 28.4% complaints are of Laryngopharyngeal problems. The difference in frequency distribution is due to large size (4).

A prospective study was conducted at tertiary care hospital in Peshawar Pakistan. Most of the ENT disorders were diagnosed in those infants were Pharyngitis (30%) Otitis media 29.33%, tonsillitis (25.33%) and Nasal Obstruction (5.3 %.) This study shows that ENT, diseases are more common in children (34). In our study cases of tonsillitis are 16%, Pharyngitis 12.4% and otitis media 24%. Results are different because of difference in age group.

A study done in Nepal on prevalence of ENT diseases in children shows that low socioeconomic status, overcrowding & joint families might be responsible for the high prevalence of ENT diseases (35).

CONCLUSION

From this study, frequency of ENT diseases among patients presenting at ENT OPD at Ayub Teaching Hospital Abbottabad, we concluded that 15.2% patients had bilateral ear wax, 13.2% had allergic rhinitis and acute otitis media, 10.8% had chronic suppurative otitis media, 10.4% had chronic tonsillitis, 8.4% had acute pharyngitis, 8% had deviated nasal septum, 5.2% had acute tonsillitis, 4.4% had acute sinusitis and otitis externa, 4% chronic pharyngitis and 2.8% had epistaxis. The main determinant is that ENT diseases are more in males and lower socio-economic families because of poor nutrition, poor housing and poor hygiene.

This study shows that allergic rhinitis, bilateral ear wax acute and chronic suppurative otitis media and pharyngitis are the common ear, nose and throat disorders.

Abbreviations

ENT — Ear, Nose and Throat (Otorhinolaryngology)

OPD — Outpatient department

SPSS — Statistical Package for the Social Sciences

WHO — World health organization

CSOM — chronic suppurative otitis media

TL — Total laryngectomy

ND — Neck dissection

RA — Radiotherapy alone

CRS — Chronic rhino sinusitis

USA — United States of America

AIDS — Acquired immunodeficiency syndrome

Conflict of Interest

No author has any potential conflict of interest.

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Sažetak

UČESTALOST OBOLJENJA KOD PACIJENATA PREGLEDANIH U ORL AMBULANTI U AJUB UNIVERZITETSKOJ BOLNICI ABBOTTABAD

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Uvod: Pacijent se ambulantno javlja specijalisti otorinolaringologije zbog poremećaja uva, grla i nosa. Oboljenja koja zahvataju regiju uha, grla i nosa su ozbiljni javno zdravstveni problem prvenstveno zbog njihove univerzalne distribucije morbiditeta, koja zahvata region glave i vrata. Ciljevi naše studije bili su da se uoči frekventnost ORL bolesti kod pacijenta, koji se javljaju specijalisti otorinolaringologije u Ajub Univerzitetskoj Bolnici Abotabad.

Metod: Ova studija izvedena je u Ajub Univerzitetskoj Bolnici Abotabad u periodu od decembra 2015. do avgusta 2016. godine. Pacijenti koji su se javili specijalisti otorinolaringologije u Ajub Univerzitetskoj bolnici Abotabad bili su uključeni u studiju. Podaci vezani za ORL simptomatologiju, kao i ostale informacije od značaja, bili su sakupljeni kroz dobro strukturisan upitnik. Podaci nakon sakupljanja su kompjuterski uneti i obrađivani koristeći SPSS-16.

Rezultati: Najmlađi pacijent je imao 1 godinu, a najstariji 80 godina. Od ukupno 250 pacijenata, 129 (51,6%) su bili muškarci, a 121 (48,4%) žene. Štaviše većinu pacijenata, 181 (72,4%) činili su stanovnici Abotabada i većina njih je bila niskog materijalnog stanja i to 165 (66,5%). Najčešći broj pacijenata je imao obostrano zapušanje spoljašnjeg ušnog kanala, zbog povećane ušne masti (15,2%), na drugom mestu su pacijenti sa akutnim zapaljenjem srednjeg uha (13,2%) i oni sa alergijskim rinitisom, koji je imalo 13,2% ispitanika.

Zaključak: Može se zaključiti iz naše studije da je najčešći problem ORL patologije obostrano zapušanje spoljašnjeg ušnog kanala ušnom masti, alergijski rinitis, akutni otitis media, hronični supurativni otitis media i devijacija nosne pregrade. Najčešći uzrok su infekcije, slaba higijena i smanjena uhranjenost.

ključne reči: učestalost, ORL bolesti, otitis media.

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