Original Research Paper

Volume - 12 | Issue - 07 | July - 2022 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Pulmonary Medicine

STUDY OF CHRONIC SUPPURATIVE OTITIS MEDIA AND ALLERGIC RHINITIS IN TERTIARY HEALTH CARE CENTRE

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ABSTRACT **AIM:** To study the prevalence and clinicopathological profile of Chronic suppurative otitis media and its correlation with Allergic rhinitis. **MATERIAL & METHODS:** The study was conducted in 100 cases attending OPD of Government Medical College Datia M.P. in the year of 2019. **RESULT:** Sample size was 100.Consent taken, 57% males and 43% Females. CSOM is found to be prevalent in the second and third decades (41%) of in people belonging to lower socio- economic status(67%) coming to the hospital with the chief complains of ear discharge otorrhea (96%), hearing loss(92%),Earache(37%),Common cold(28%),Headache(23%) and fever(21%),Itching (20%),Bilateral ear involvement (58%) ,Left Ear(23%),Right Ear(19%),Safe CSOM(77%) and unsafe CSOM(23%). **CONCLUSION:** CSOM is the most common cause of preventable hearing loss in our country which causes major handicaped amongst the youth and increases the burden over the society. With the prevalence of 10–30% CSOM , allergic rhinitis (AR) is the most common allergic disorder. AR occurs in association with a number of other disorders, principally sinusitis, asthma, allergic conjunctivitis , and atopic dermatitis. CSOM prevalence can be reduced by increasing the awareness in the society regarding ear discharge and hearing loss.

KEYWORDS : CSOM, otorrhea ,Allergic rhinitis(AR)

INTRODUCTION:

Chronic suppurative otitis media (CSOM) is an important middle ear disease (1, 2). It is the commonest cause of persistent mild to moderate hearing impairment. Most cases are sequelae of acute suppurative otitis media. CSOM is a long standing inflammatory disease affecting mucoperiosteal lining of the middle ear. It is a destructive and persistent disease with irreversible sequelae and can lead to various intra and extra cranial complications.

CSOM is painless and the otorrhea may be intermittent, appearing only when an upper respiratory tract infection occurs. The effect on hearing is variable from slight even though both ears. Longer the ear discharge persists the worse the hearingand deafness due to nerve.

CSOM may be devided into 'safe' and 'unsafe' ear disease. 'Safe' disease was characterized by a central perforation of the pars tensa or tubo- tympanic disease to indicate disease of the Eustachian tube and tympanic cavity. The inflammatory process affected the mucosa of the middle ear cleft .

'Unsafe' disease/ atticoantral disease was typified by a marginal perforation of the postero-superior pars tensa or of the pars flaccida . Cholesteatoma was almost always present. Bone erosion, with potentially dangerous results, was an inherent pathological feature. Peculiar anatomy of the middle ear liable to repeated infection from the nasopharynx along the Eustachian tube.

It responds very poorly to routine antibiotics. Micrococcus pyogenes and Staphylococcus aureus today present a serious problem. It is therefore; clear that the treatment may became progressively more difficult, because of the increased number of resistant organisms found in hospitals.

With the prevalence of 10–30%, allergic rhinitis (AR) is the most common allergic disorder. AR occurs in association with a number of other disorders, principally sinusitis, asthma, allergic conjunctivitis , and atopic dermatitis (3-6). Studies shows migraine headache in patients with AR (7,8)

MATERIALS AND METHODS:

The study was conducted 100 patients attending OPD, Government Medical College Datia M.P. in year 2019. Consent taken and baseline data were recorded including history,symptoms, general examination, systemic examination, and otorhinological examination. Data was collected agewise, sex, presenting complaints, socio-demographic status, and the laterality of ear involved.

RESULTS& DISCUSSION:

Patients with a history of ear discharge for more than 3 months were studied. Of them , Out of them 57% males and 43% Females. CSOM is found to be prevalent in the second and third decades (41%) of in people belonging to lower socio- economic status(67%) coming to the hospital with the chief complains of ear discharge otorrhea (96%), hearing loss(92%),Earache(37%) Bilateral ear involvement (58%) , Left Ear(23%),Right Ear(19%),Safe CSOM(77%) and unsafe CSOM(23%), AR symptoms-common cold(28%), Headache(23%), fever(21%), Itching (20%).

The reason for high prevalence in second and third decade age may be due to increased awareness in young patients about disease, seek treatment before joining jobs or accessibility to hospital is easier for this group of patients(3). Aberg (9) reported a mean age of 41 years, Vartiainen (10)a mean age of 38 years.

Families of a lower social class have congested homes with poor sanitation and hygiene, these are prone to transmission of infectious agents. In addition malnutrition, suppresses the immune system which causes greater risk of disease.

Bilateral ear involvement have similar resuts in study done by Akinpelu OV et al. (2007) (12).

All the cases of CSOM under study presented with ear discharge. Hearing loss was associated with discharge in 92% of cases (13). Earache was the next most common complaint.

Examination findings showed that most of the cases had mucopurulent discharge (63%) with medium sized (43%) central perforation (15). Majority of the cases (77%) had safe CSOM with central perforation while only 23 cases had attic perforation with granulation tissue, cholesteatoma and polypoidal changes (16)

CONCLUSION:

CSOM with and without complications continues to affect a large number of patients particularly in developing countries. It affects the lower socio-economic group of people. It is an important cause of morbidity in very large group of Indian population in the form of preventable hearing loss. This morbidity increased as disease progresses. Students with CSOM leads to deafness, which affect their education resulting in increased burden over country. Abscess related

to mastoid is still the most common complication of CSOM followed by intra cranial complications. CSOM also have correlated with allergic rhinitis. These complications were more in patients with unsafe perforations. These complications mandate close cooperation between ENT surgeons and neurosurgeons. There was correlation between AR & CSOM.

Tables: 1 Age Wise Distribution

AGE IN YEARS	No. OF CASES
1-10	12
11-20	28
21-30	41
31-40	08
41-50	06
>50	05
Total	100

Table No. 2: Sex Wise Distribution

SEX	No. OF CASES
Males	57
Females	43
TOTAL	100

Table No. 3: Presenting Complaints

SYMPTOMS	No. OF CASES
Ear Discharge	96
Hearing Loss	92
Earache	37
Tinnitus	18
Swelling around the ear	21
Headache	23
Fever	21
Common cold	28
Vomiting	08
Itching	20
Vertigo	05

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