

Clinical Profile Of Secretary Otitis Media In Patients Visiting Ent Department Of Sir T. General Hospital, Bhavnagar

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Abstract: Background: Secretary otitis media is chronic inflammation of middle ear cleft characterized by accumulation of nonpurulent fluid behind intact tympanic membrane. This study was done to identify various modes of presentation of secretary otitis media in different age groups and gender and to evaluate its outcome by various modalities of treatment. Material And Methods: This study comprised of 50 cases of bilateral or unilateral secretary otitis media of all the age groups. It is prospective observational study. Secretary otitis media is diagnosed by history, otoscopic examination and audiometric evaluation. Complete history and examination was done according to the proforma. All the patients were given conservative and medical treatment and followed up regularly. Cases refractory to medical treatment required surgical treatment based on clinical presentation and associated symptoms. It was carried out during the period of August 2021 to April 2022, in ENT department of Sir T. general hospital Bhavnagar. Result: In this study, maximum number (28%) of cases belonged to age group of 10-20 years, more commonly seen in males with Male : Female ratio of 1.78:1. Most of the cases (44%) were from lower socioeconomic class. Ear blockage or fullness of the ear (76%) was the most common clinical presentation. On otoscopy, fluid level with air bubbles was seen most commonly (84%). All the cases (100%) were put on medical treatment and regularly followed up. 50% responded well but the remaining 50% refractory cases required other surgical modalities of treatment based on clinical presentation and associated symptoms. Surgical treatment included adenoidectomy and adenotonsillectomy (20%), myringotomy with grommet insertion (4%). Myringotomy was done in 20% of cases. Septoplasty was done in 6% of the patients of secretary otitis media. Conclusion: Secretary otitis media was common in 10-20 years age group. More common in males with lower socioeconomic class. Most common clinical presentation was ear blockage or fullness of ear. On otoscopy, fluid level with air bubbles was the most common sign. Treatment consisted of medical and surgical modalities. All the cases obtained subjective relief and improvement in the symptoms. [Mehta J Natl J Integr Res Med, 2023; 14(3): 25-27, Published on Dated: 18/05/2023]

Key Words: Secretary Otitis Media, Tympanic Membrane, Myringotomy, Grommet, Adeno-Tonsillectomy, Adenoidectomy.

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Introduction: Secretary otitis media is chronic inflammation of middle ear cleft characterized by accumulation of nonpurulent serous or mucoid fluid behind the intact tympanic membrane. Commonly seen in younger age groups. Any condition which affects proper functioning of mucocilliary system of upper respiratory tract may predispose to development of secretary otitis media. Diagnosis is based on history, otoscopic finding of tympanic membrane and confirmed by tympanometry. A proportion of secretary otitis media resolves spontaneously or with treatment of upper respiratory tract infection. Refractory cases based on their symptoms require surgical management. If remain undiagnosed, it may present later as

speech, language or learning delay and sometimes as behavioural and educational problems.

Material & Methods: This study was prospective observational, conducted in the department of ENT government Medical college ,Sir T. hospital, Bhavnagar from August 2021 to April 2022 ,after approval of the ethics committee government medical college Bhavnagar. Total 50 cases of unilateral or bilateral secretary otitis media were studied including all age group and sex. All patients of secretary otitis media were diagnosed by history, otoscopic examination. Patients who are known case of otosclerosis, patients with mixed and sensorineural hearing loss and

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patients who have been given head and neck radiotherapy are excluded from this study.

Detailed history followed by thorough clinical examination of ear,nose and throat was done.

Assessment of hearing was done with tuning fork test, pure tone audiometry, tympanometry.

Patients with sinonasal symptoms underwent direct nasal endoscopy to rule out pathologies that can cause eustachian tube dysfunction. X rays of nasopharynx and paranasal sinus also taken.

All the patients were started with conservative and medical line of management based on probable etiology found during clinical examination.

These patients were followed up on weekly basis for 1 month and then monthly for total duration of 3 months. Cases refractory to medical management were considered for surgical management on the basis of associated symptoms.

Results: This study was carried out in 50 patients presented with bilateral or unilateral secretory otitis media, in the department of ENT government medical college and Sir T. general hospital Bhavnagar.

Table 1: Unilateral V/S Bilateral Ear Involvement

Ear	Cases	Percentage
Unilateral	22	44
Bilateral	28	56
Total	50	100

Table 2: Age Distribution Of Cases

Age Distribution (In Years)	No. Of Cases	Percentage
Less Than 5	1	2
5-10	12	24
10-20	14	28
20-30	13	26
More Than 30	10	20
Total	50	100

Table 3: Sex Distribution

Sex	No. Of Cases	Percentage
Male	32	64
Female	18	36
Total	50	100

Table 4: Socioeconomic Class

Socioeconomic Class	No. Of Cases	Percentage
Upper Class	8	16
Middle Class	20	40
Lower Class	22	44
Total	50	100

Table 5: Symptom Wise Distribution

Symptoms	No. Of Cases	Percentage
Fullness Of Ear Or Sense Of Blocked Ear	38	76
Mild Form Of Decrease Hearing	16	32
Ringing Sensation	10	20
Ear Ache	24	48
Autophony	4	8
Asymptomatic	7	14

Table 6: Sign Wise Distribution

Signs	No. Of Cases	Percentage
Dull, Luster Less	18	36
Amber Colored	32	64
Fluid With Air Bubble	42	84
Localized Retraction	9	18

Table 7: Hearing Improvement

Hearing Improvement	No. Of Cases	Percentage
Less Than 10db	15	30
More Than 10db	18	36

Table 8: Modalities Of Treatment

Modalities Of Treatment	No. Of Cases	Percentage
Medical	25	50
Myringotomy	10	20
Myringotomy With Grommet Insertion	2	4
Adenotosillectomy	10	20
Septoplasty	3	6

Discussion: The high age incidence of 10 to 14 years in our study indicates the late presentation to the hospital due to poverty, ignorance and low socioeconomic conditions of the patients in this area. There is also because of lack of regular screening for hearing in school children as they do in western countries. This justifies necessity of regular screening of hearing in school children and wakeful attention by parents and school teachers. The socioeconomic status was based on

modified Kuppuswamy scale. Here the education levels, occupation of head of household and per capita family income were taken into account. It has influenced in form of early detection and regular follow up during study. A symptom of secretory otitis media was not much cumbersome so, led to ignorance by the patients resulted in long course of condition.

Recurrent attacks of secretory otitis media and long course of condition caused changes in the structural integrity of tympanic membrane and produced localized retractions in tympanic membrane and atelectasis of middle ear, which further reduces conduction of sound. In half of the patient properly executed conservative management was sufficient and patient compliance played a major role in this? Surgical management was reserved only for patients refractory to medical treatment and who had etiological factors like hypertrophied adenoid and tonsil or deviated nasal septum.

Conclusion: My study on clinical profile of secretory otitis media led me to conclude that this is the common otologic problem in young age children of 1st or 2nd decade of life. Males are affected more than female. Lower middle class children affected more than the upper one.

The most common presenting symptom is fullness of ear or ear blockage.

Otoscopic finding of tympanic membrane most commonly seen is fluid level with air bubbles followed by a pale amber colored tympanic membrane.

On routine follow-up this finding changed to localized retraction or atelectasis of tympanic membrane in some of cases.

Medical management was sufficed for half of the total patient. Probable causative factors found most commonly in the age group of 5 to 15 years of age, in the form of adenoid hypertrophy, recurrent episodes of tonsillitis, nasal septal deviation, allergy to dust and fumes, these patients had undergone surgical management based on the severity of their problem hampering the routine life.

After management by any means either medical or surgical all patients have obtained subjective relief and improvement in the symptoms.

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Conflict of interest: None
Funding: None
Cite this Article as: Mehta J, Jha S, Goyal P, Chaudhari M, Meena M, Chawda U. Clinical Profile Of Secretory Otitis Media In Patients Visiting ENT Department Of Sir T. General Hospital, Bhavnagar. Natl J Integr Res Med 2023; Vol.14(3): 25-27