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Original Article

Ear, Nose and Throat Section

To Study the Level of Awareness About Complications of Chronic Suppurative Otitis Media (CSOM) in CSOM Patients

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ABSTRACT

Introduction: Chronic Suppurative Otitis Media (CSOM) is one of the most common diseases in clinical practice. It affects large number of people. Disease causes disability and mortality because of its ability to cause complications. Patients develop complications because of lack of awareness about the disease, scarce availability of qualified otologists at peripheral areas and economical constraints. This study was conducted to study the awareness about CSOM and its complications.

Materials and Methods: Patients suffering from CSOM attending outpatient department of Ear, Nose and Throat Department were included in this study. After taking proper history and examination to confirm the diagnosis patients were given structured questionnaire to assess their knowledge about CSOM and its complications. Results tabulated and compared with literature.

Results: Majority of our patients (77.6%) were from low socio-economic status group. Maximum number of patients was from 3rd and 4th decade of life. Only 29.5% patients understood perforation in Tympanic Membrane (TM) as a cause for continued discharge. 94% patients did not differentiate between safe and unsafe CSOM. 52.2% had knowledge about entry of water in ear as cause for recurrence of discharge in CSOM. 44.7% said CSOM can be cured by surgery. Only 7.4% said infection can spread to brain, 23.3% knew about collection of pus around ear, 11.9% said it can cause vertigo, but none of them recognized facial nerve palsy as complication of CSOM. 38.8% took self medication and 16.4% consulted qualified ear nose throat (ENT) doctor.

Conclusion: Although CSOM is a major disease affecting large number of people, awareness regarding disease and its complications is still poor. Mass education programs aimed at educating people about CSOM are need of the hour.

Keywords: Chronic suppurative otitis media, Socio-economic status, Otorhinolaryngology

INTRODUCTION

CSOM is one of the common diseases in otorhinolaryngology practice today. CSOM is more common in developing countries. In our country burden of the disease is too high considering the huge population. Prevalence of CSOM in the world is around 65-330 million/year. Majority of world CSOM burden is attributed by Southeast Asia, Western pacific and African countries. India falls into countries with highest prevalence (prevalence > 4%) [1]. CSOM is more common in low socio-economic status groups, communities with overcrowding and poor personal hygiene. Incidence of CSOM has been declining due to improvement in living conditions and use of widespread antimicrobial therapy [2]. However still many patients cannot afford treatment because of economic constraints. Scarcity of qualified surgeons forces these patients to take medical advice from local unqualified persons or sometimes they resort to self-medication. This makes them vulnerable to develop complications of CSOM. Lack of awareness and not attending to hospitals is probably because of ignorance, poverty and traditional beliefs [3]. Lack of sufficient number of qualified ENT practitioners, lack of health education and health programs aimed at CSOM also adds to it. [4].

Proper management of CSOM gains importance because of its ability to cause serious complications. Many of our patients suffering from CSOM are unaware of this. With technological revolutions like mobile and internet, patients can access information about the disease anytime and anywhere. In spite of this, awareness about CSOM and complications is low and still patients present with life threatening complications that to in late stages. Lack of awareness and ignorance further increases the chances of developing either extra cranial or intracranial complications. These complications if not treated can give rise to morbidity and mortality. There is a need to study the level of awareness about complications of CSOM in patients suffering from CSOM in the society. This should help in planning interventional measures.

In this study we have made a small effort to study the same. Other topics regarding traditional beliefs, ear cleaning practices and treatment seeking patterns were studied.

MATERIALS AND METHODS

This study was conducted in tertiary care teaching hospital in Bagalkot, Karnataka, India from August 2012 to May 2013. One hundred thirty-four patients suffering from CSOM attending ENT outpatient department were selected for study. After taking proper history all patients were presented with structured questionnaire. Questionnaire contained multiple questions aimed at assessing the knowledge of the patient about CSOM and its complications, medical advice seeking pattern and ear cleaning practices. The data obtained was analysed.

RESULTS

Age and sex distribution of the patients.

Among study group highest number (32) of patients were from 4th

decade of life followed by 3rd decade (30). Results are shown in [Table/Fig-1]. Majority of the patients (77.6%) were from low socio-economic status [Table/Fig-2]. When enquired about treatment seaking pattern we found that 38.8% of the patients took self medications in the form of ear drops [Table/Fig-3]. When ear cleaning habits were questioned, maximum number of patients (52.23%) cleaned their discharging ear using match stick with or without cotton [Table/Fig-4].

When patients were questioned about relation between continuous ear discharge and its association with perforation of TM, only 29.8% had the knowledge of this association. Rest of patients thought that ear discharge was due to recurrent abscess formation in ear.

Around 52.2% of patients recognized entry of water in ear as a cause for recurrence of discharge in CSOM. 94.1% did not differentiate CSOM into safe and unsafe type. On enquiring about knowledge of complications caused by CSOM, 35.82% said CSOM can cause serious complications. Among the complications 7.4 % said it can spread to brain, 23.3% knew about collection of pus around the ear, 11.9% said it can cause giddiness and vertigo, 22.3% said it can cause permanent hearing loss. Surprisingly none of the patients questioned attributed CSOM as a cause of facial paralysis.

When questioned about the surgical knowledge 44.7% of the patients said it can be cured by surgery. Only 25.3% of the patients said early surgery is a necessary.

Age group Years	Number of patients / percentage	Male	Female
1-10	8 (5.9%)	4 (2.9%)	4 (2.9%)
11-20	28 (20.8%)	20 (14.9%)	8 (5.9%)
21-30	30 (22.3%)	16 (11.9%)	14 (10.4%)
31-40	32 (23.8%)	18 (13.4%)	14 (10.4%)
41-50	26 (19.4%)	14 (10.4%)	12 (8.9%)
51-60	8 (5.9%)	6 (4.4%)	2 (1.4%)
61-70	2 (1.4%)	2 (1.4%)	-

[Table/Fig-1]: Age and sex distribution in CSOM patients

Economic status	No of patients	Percentage
Low socio-economic	104	77.6
Middle class	30	22.3

[Table/Fig-2]: Table showing socioeconomic status of patients

Treatment seaking pattern	No. of patients	Percentage
Self -medication	52	38.8
From quacks	20	14.9
Traditional medical system doctors	36	26.8
MBBS/ ENT surgeons	22	16.4

[Table/Fig-3]: Treatment seaking pattern

Ear cleaning practice	No. of patients	Percentage
Match stick with or without cotton	70	52.23
Water	40	29.85
Cotton ear buds	24	17.90

[Table/Fig-4]: Table showing ear cleaning practice of patients

DISCUSSION

CSOM affects 2% of the population [5]. Decreased hearing is the disability caused by the disease. In industrialized countries, hearing loss is known to be the third most prevalent chronic condition in older adults after hypertension and arthropathy [6,7]. This disability interferes with communication ability of an individual with problems in social communication and professional life. This in turn leads to reduced professional efficiency. In cases of CSOM with cholesteatoma, serious complications can occur which can be potentially life threatening. In spite of huge burden of the disease in our country and consequences of the disease, the knowledge regarding the CSOM and its complications is still low in our patients. In our study only 29.8% of the patients understood the relations between ear discharge and perforation in TM. If mass educational programs aimed at imparting the knowledge about the nature of the disease and the complications caused by it are implemented widely, the disease burden may come down drastically. Advancement in technologies like mobile and internet can be used to spread the basic knowledge about the disease.

Most of our patients were from low socio-economic status (77.6%). In a study conducted by Sengupta A et al., 60% of their patients were from low socio-economic class [8]. Poor living conditions, poor access to medical care, inadequate medical treatment, recurrent upper respiratory tract infections and nasal diseases have been recognized as risk factors for CSOM [1]. Thus improving living conditions with better sanitation and good access to medical care can reduce the incidence of CSOM and its complications [9]. Only 44.7% of patients knew that surgery can cure the CSOM. 25.3% said early surgery is beneficial. With surgical facilities for CSOM available only in urban areas and tertiary care centers, there is a need for making these facilities available to the rural people also. This can be done by improving primary health care set up or by regular health camps for CSOM patients which has shown positive effect [10,11].

Regarding treatment seaking pattern, majority of our patients still relied on self-medication and used ear drops as treatment. Only 16.4% consulted qualified MBBS/ENT surgeons. The high percentage of self-medication by the patients in our study could be due to wide spread availability of ear drops as over the counter products in our country. But their ototoxic potential needs to be kept in mind.

When we analysed ear cleaning habits of our patients, majority of the patients (52.23%) still used matchstick to clean their ears. Only 17.90% of patients used commercially available cotton ear buds. Our patients still lack basic knowledge about proper methods of cleaning the ear.

CONCLUSION

In this study we have made an attempt to study the knowledge about CSOM and its complications in patients. Knowledge regarding various aspects of disease is still low. Since our study group was small, we recommend for large scale studies on this topic. This can help in planning interventional health education programs.

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