



EAR WAX OR CERUMEN AND ITS MANAGEMENT STRATEGIES IN A RURAL COMMUNITY OF PANIPAT, HARYANA

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ABSTRACT

Earache is a common complaint in ENT practice in a tertiary care hospital. This article investigates one of the most common cause of earache; cerumen impaction. In Lucknow, India, the incidence of ear wax was very common in both urban and rural population and overall hearing impairment was seen in 15.14% of rural as against 5.9% of urban population. In this study a cohort of about 30 patients coming from a rural background where multiple myths of wax in the ear exists; community awareness regarding this common public health problem is very much needed . This study was organised with the objective to correctly address the misinformation and perceptions about ear wax prevailing in adjoining areas of our Medical College and give appropriate and correct advice to the patients. A case of cerumen impaction and cleaning has been described in this article.

KEYWORDS

INTRODUCTION: CERUMEN IMPACTION

In developing countries, ear injuries and earache are quite common and is a neglected public health problem, much owing to the prevalence of myths and prejudices which are quite rampant in rural settings and remains entrenched for its treatment in the domain of quacks and non-qualified doctors, due to lack of ENT specialists in rural settings. It is a common belief that removing ear wax is a necessity and universal step in maintenance of appropriate aural hygiene. The truth is just the reverse as removing cerumen softens the ear canal and increases humidity which may lead to an increase in ear infections and impair the normal functioning of the ear. (Nutall T et al, 2004) (Poulton S, et al, 2005). However, the peculiarities of cerumen are vivid and with its plethora of lysosomes, glycoproteins, immunoglobulins, lipids ; it performs bactericidal function action which coupled with its acidic pH (about 4 to 5) does not allows the growth of harmful pathogens in the external auditory meatus. (Oron Y et al, 2009)

Disorders of hearing are more common in lower socio-economic strata and may lead to lower performance in schools if left unattended. In a study conducted in Lima, Peru, 335 school children aged 6 to 19 years, were assessed by pure tone audiometry, tympanometry and otoscopy. This study showed that, school children from lower socioeconomic strata were four to seven times more likely to experience hearing impairment than children from higher socioeconomic strata and children from the developed countries. (Czechowicz JA et al, 2009). In another study, conducted in Lucknow, India, where a multi-cluster survey was carried out from July 2003 to August 2004, the incidence of ear wax was common in both urban and rural population and overall hearing impairment was seen in 15.14% of rural as against 5.9% of urban population. Also this study concluded that the need of surgery was much more among rural areas, necessitating more advanced surgery to manage advanced or dangerous ear disease. (Mishra A, et al, 2011). Although cerumen impaction is thought to be very common public health problem its prevalence varies in many countries. For example, in Nigeria only about 6% in the general population 17.6% of young adults in the age group 21-30 years were having this problem. (Olaosun OA, 2014) (Olajide TG, 2015). In the United Kingdom at any given point of time, 2% to 6% of the general population suffer from cerumen impaction. In USA, \$46.9 million was spent on 1.3 million cerumen dis-impactions in the year 2012. (Guest JF, et al, 2004)

Rationale

Since earache and cerumen impaction is one of most common complaint for patients to seek medical attention we sought to study this problem in a tertiary care hospital based at NC Medical College and Hospital, Israna Panipat, Haryana. Given the fact that about 12 million people in the United States seek medical attention for cerumen-based problems, resulting in almost 8 million ear irrigations being performed annually and the incidence of ear wax was very common in both urban and rural population in India also (Mishra A, et al, 2011) ; this study was organised with the objective to correctly address the misinformation about ear wax prevailing in adjoining areas of our Medical College give appropriate and correct advice to the patients.

Methodology

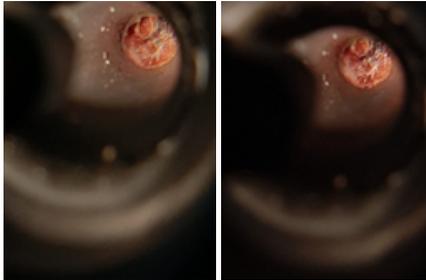
This study was carried out in June to August 2019 at Department of ENT, N C Medical College and Hospital, Israna, Panipat, Haryana, India



An FGD was carried out at Department of ENT, N C Medical College and Hospital, Israna, Panipat, Haryana , to find out the myths and misconceptions prevailing in Israna and to improve health seeking behaviour of the community regarding management of ear ache

Aims and Objectives

1. To carry out otoscopy in patients seeking attention for ear ache and diagnose the existing condition
2. To give proper advice regarding the management of wax in the ear

Observations**Otosopic findings of cerumen in external auditory canal**

A closer view of Cerumen or ear wax seen over the external auditory canal

DISCUSSION**Cerumen and its anatomy**

Cerumen or ear wax is made up of wax which consists of saturated or unsaturated fatty acids, squalene and cholesterol. Its main function is to clean, lubricate, and protect the external auditory canal (Roland PS, et al 2008) Cerumen is generally classified into two types, the “dry” type, which is more prevalent in people of Asian descent and the “wet” type, which is more prevalent among Caucasian and black individuals (Petrakis et al, 1971).

Myths about Cerumen

A spread sheet analysis was done and main themes identified and these are as follows. After conducting FGDs in patients having earache; the most common myth were :-

1. Practice of self-cleaning:

The habit of self-ear cleaning is a practice commonly performed in urban and rural settings and should be discouraged as it may cause harm to the external auditory meatus. Many times this may be attempt to clean the ear wax as pointed above is a myth that cleaning ear wax is mandatory to maintain good aural hygiene. There is generally poor awareness regarding the danger of self -cleaning of the ear as well as the function of wax within the ear. In Nigeria indicated 93.4% of young educated adults perceived that wax was like a dirt in the ear and has to be removed.

2. Necessity to clean the ear wax

Most of the patient felt that wax was an unnecessary substance in the ear and should be removed. The most dangerous part was a sharp instrument like the pointed end of a pencil or a sharp instrument was generally indicated for its removal. Some even attributed that putting oil such as hair oil or coconut oil was soothing and was the best way to remove wax.

CONCLUSION

The above article clearly shows the need for community awareness regarding management of ear ache and cerumen impaction. A patient information booklet is very well made and should be translated in Hindi and distributed to all community folk. This would be of immense benefit to prevent external ear injury and also improve aural hygiene. (Seth R, et al, 2017)

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