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Chronic Otitis Media (COM) in adults

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SUMMARY

Chronic otitis media is the most advanced state in the spectrum of otitis media. The objective of this research was to identify the type of chronic otitis media in Nicaraguan adults aged 25-65. For this, an observational and descriptive study of the cross-section in which 312 clinical records of patients diagnosed with ear pathologies of which 189 were diagnosed with chronic otitis media were reviewed. A systematic probabilistic sampling technique was used, also a data collection sheet was utilized. The variables under study were age, sex, type chronic otitis media and drug treatment. For the statistical processing of these variables the IBM-SPSS® (Statistical Package for the Social Sciences) version 25.0 software was used for Windows 7 32-bit. The Microsoft 365 Office® 2010: Microsoft Word® software package was used for the debugging of any writing or typing error thus facilitating the analysis and reproduction of the results and Microsoft Excel® to edit the graphs and tables to make the information obtained more comprehensible. The following results were obtained: the most frequent type of chronic otitis media was chronic non-cholestomatous otitis media with an active infectious process (55%), regardless of whether it was cholestomatous or non-cholestomatous they received as the main treatment: loratadine in 55.4% (n=173). Concluding that chronic non-

cholestomatous otitis media with the active infectious process is the type of chronic otitis media common in our environment.

INTRODUCTION

Chronic otitis media involves high public health expenditure, as mentioned by Quintero Noa, Álvarez Lam, Hernández Cordero, Meléndez Quintero (2013), this clinical entity has an expense that amounts to US $4 billion for medical care and otological surgery.

Suppurated chronic otitis media (COM) is defined by Quintero Noa and Cols (2013) as a chronic inflammatory process of the middle ear with no tendency to cure (more than 3 months), which usually causes structural lesions: definitive membrane scar sequel tympanic (TM), destruction and ankylosis of the oscillatory chain, eardrum sclerosis or cholesteatoma. It affects approximately 2-3% of the world population according to figures expressed by Gutiérrez, Godoy, Cárdenas, and Argomedo (2016), also mention that there is no predominance of sex.

RESULTS

Chronic otitis media affected all age ranges, being the age range mostly affected between 51-59 years, 17% (n = 53) followed by the age range between 60-65 years 13% (n = 42) and third to the range of 25 - 31 years 10% (n = 30). Chronic otitis media affected female sex in 44% (n=136) and male 17% (n = 53).

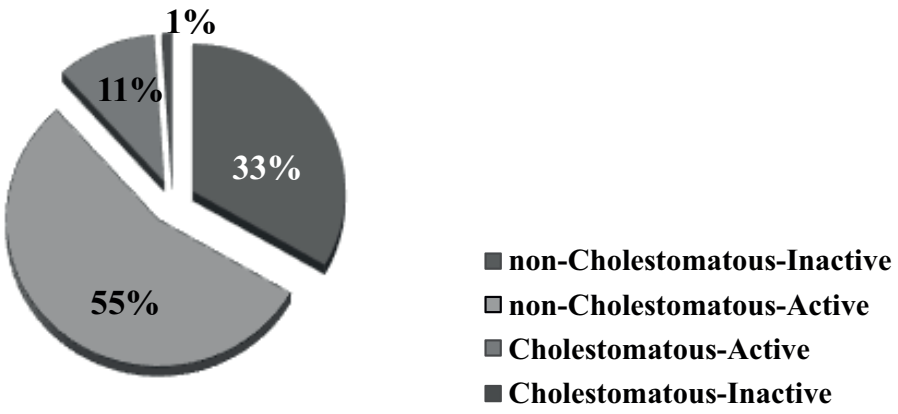
The COM was classified taking into account the presence or absence of cholesteatoma related or not to an active or inactive infectious process (Table 1), as recorded in the file, it was observed that of the 189 (100%) patients diagnosed with COM a 167 (88, 3%) were classified as non-cholesteatoma. Within which, the active non-cholestomatous COM was more frequent (Graph 1) in 55% (n = 104) followed by the non-cholestomatous COM with 33.3% (n = 63).

Table 1. Type of chronic otitis media

Type of Chronic Otitis Media	Frequency	Percentage
COM * not Cholestomatous – Inactive	63	33,3
COM * not Cholestomatous – Active	104	55
COM * Cholestomatous - Active	20	10,6
COM * Cholestomatous - Inactive	2	1,1
Total	189	100,0

Note: The term active or inactive refers to the presence or not of an infectious focus at the time of consultation. The term cholestomatous refers to the presence or not of cholesteatoma in

the middle ear. COM*: Chronic Otitis Media. **Source:** Matrix of data extracted from the clinical file.



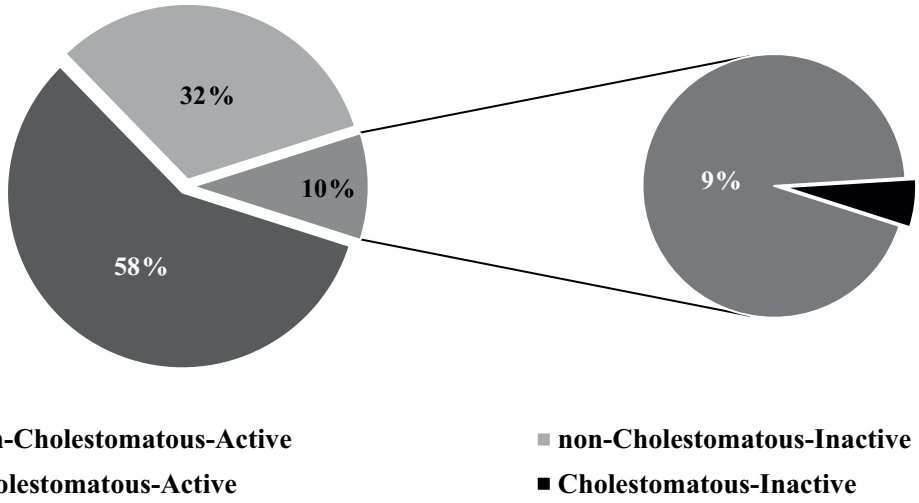
Graphic 1. Type of chronic otitis media. Source: Table 1.

Patients with COM associated or not with other pathologies and regardless of whether it was cholestomatous or non-cholestomatous received as main treatment loratadine in 55.4% (n=173) (Table2). Of the patients who were prescribed loratadine 39.7% (n = 122) had only COM.

Loratadine was prescribed according to the type of otitis (Graph 2) in 57.8% (n = 100) to patients with a diagnosis of active non-cholestomatous COM and 32.4% (n = 56) of patients diagnosed with COM inactive cholestomatous.

Table 2. Prescriptions of loratadine in chronic cholestomatous and non-cholestomatous otitis media in the study population. Source: Matrix of data extracted from the clinical file.

Type of Chronic Otitis Media	**Loratadine prescription**	
	Frequency	**Percentage**
COM * not Cholestomatous – Active	**100**	**57,8**
COM * not Cholestomatous – Inative	**56**	**32,4**
COM * Cholestomatous - Active	16	9,2
COM * Cholestomatous - Inactive	1	0,6
TOTAL	173	100,0



Graphic 2. Loratadine prescriptions in chronic otitis media. Source: Matrix of data extracted from the clinical file.

DISCUSSION

The age range most frequently affected was between 51-59 years; it was found that the female sex was mostly affected by chronic otitis media, this finding does not match what was reported by Roig Ocampos Ramallo, JL, Roig Ocampos Forteza, JL, Rossi Vietsky, L, and Mena Caballero, F. (2009) and Chirinos Apaza, M. (2014), who express that chronic otitis media is more frequent in men, this finding is an interesting contribution to the medical literature since it gave this research an important relevance when providing novel data related to the behavior of this pathology in our environment.

In this study, although there are different classifications for chronic otitis media, the presence and absence of cholesteatoma associated or not with an active infectious process was considered. It is reported that 90% of chronic otitis media in these patients was non-cholestomatious associated with an active infectious process, according to Chinski Alberto and Chiski, Hernan (2009) who express that this clinical form is seven times more frequent than cholestomatous chronic otitis media, which is associated with a low socioeconomic and cultural level of patients.

The fact that infectious processes are associated with cholestomatous in our environment demonstrates the need to protocolize the treatment of this pathology especially in the primary approach, because in daily practice, normally primary care professionals base their decisions on therapeutic knowledge learned during their medical training or indications of other professionals which could contribute to the fact that the discrepancy in the primary treatment of this pathology is related to the tendency to chronicity of it. This finding suggests the hypothesis that the causal etiology of cholestomatous of cholestomatous origin in our environment is due to recurrent otological infections and to the low socioeconomic and cultural level of these

patients, which translates the appearance of cholesteatoma, not as a clinical entity isolated but as a complication of cholestomatous with torpid evolution due to poor adherence of patients to the prescribed treatment; it is worth mentioning that many authors agree that the etiology of cholesteatoma is multifactorial.

With regard to cholestomatous associated with cholesteatoma, it was found that only 10% of this pathology was associated with the presence of cholesteatoma, a fact that reflects the adequate management, diagnosis and therapeutic of the medical staff working at the Hospital Escuela Antonio Lenín Fonseca despite the fact that there is no standardized standard for the management of this pathology in our environment. It is noteworthy that the majority of patients with cholestomatous received loratadine, regardless of whether or not it was associated with an infectious process, this fact does not agree with the reports in the medical literature or with the guidelines of the international guidelines for the approach and management of this pathology, which do not report clear data on the usefulness of this drug in these patients. The adoption of this medical practice by the medical assistance staff suggests the hypothesis that the prescriber is vulnerable to influences by the user or his family member who, seeing the fact that his chronic process does not require pharmacological treatment influences exerting psychological pressure on the prescriber, who ends in a prescription for complacency and not based on clinical criteria that support it. In this regard, it is suggested to choose strategies that favor the rational use of medicines, such as the correct explanation of the technique of cleaning the external acoustic meatus or external auditory meatus (EAM) and its importance in the evolution of the disease, as well as in the prevention of associated auditory pathologies such as otomycosis caused by the humid environment in the external auditory canal (EAM). These strategies will contribute to the decrease in health costs generated by the unnecessary prescription of medicines and will favor the degree of knowledge of individuals by raising awareness of the importance of self-care.

With regard to the prescription of antihistamines such as loratadine, some authors advise against their clinical use, such as Griffin GH, Flynn C, Bailey RE, Schultz JK (2011) who report that the use of antihistamines in otitis media patients does not imply any benefit or certain harm to the patient, whether prescribed in isolation or combination with the treatment of otitis media, in fact, they made a recommendation against its use. This finding opens the door to a line of research focused on verifying the clinical utility of this drug and the effect of its use in patients diagnosed with chronic otitis media based on the hypothesis that antihistamines such as loratadine by inhibiting the receptors of Histamine H1 favors the decrease of the characteristic otic secretion of this clinical entity, however, for this an epidemiological study of greater methodological soundness will be required. Chronic otitis media in adults is very common in our environment and unfortunately there are no available, accurate and reliable data on the real prevalence of this disease both in our environment and internationally, conferring

the fact that the data provided in this research will serve as precedents for future research, which will allow in the future to estimate not only the prevalence but the incidence of chronic otitis media cases in our environment.

CONCLUSIONS

It is concluded that chronic non-cholestomatous otitis media associated with an active infectious process is a frequent pathology in our environment that mostly affects women between 51-59 years.

More studies with greater methodological soundness are needed, such as a case-control study or clinical trial to clarify the benefits or disadvantages of using loratadine in patients with chronic otitis media regardless of whether or not they are cholesteatoma with or without an active infectious process.

The protocolization of the primary approach to auditory pathologies in our environment is necessary.

ETHICAL DISCLOSURES

Protection of people and animals: The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of the data: The author declares that the confidentiality of the doctor-patient relationship registered in the clinical file was respected at all times, since at no time during the collection of information and dissemination of the results was the name or any information recorded that could identify him/her.

Right to privacy and prior informed consent: The author declares that in this study the source of information was the clinical file and there was no direct contact with the patient, so his consent was not requested.

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