

Rationalization of Drug Therapy of ENT (Ear Nose Throat) Diseases

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Abstract— Background: Drug therapy in ENT very often requires the combined prescription of a number of products depending on the symptoms found. Some rationalization of this therapy is necessary to better adapt it to the causal condition. **Objectives:** To assess the habits of ENT drug prescription and propose the principles of a rationalization of the treatment of common ENT conditions. **Study Framework:** District Hospital IV of Bamako, Mali. **Patients and Methods: Patients:** The retrospective study identified the drug prescription habits of common ENT conditions by practitioners in the department involving 110 patients during the year 2020. **Methods:** All patients in the study received medication management. **Results:** The mean age of patients was 26 years with extremes from 01 months to 76 years. A predominance of the female sex was noted: 59 cases (54%). An optimal standard treatment was proposed taking into account the symptomatology of the study's common ENT conditions (acute pharyngitis, acute otitis media, rhinitis, rhinosinusitis). Three-product prescription predominated in 45 Patients (48.39%). The most used products were: antibiotics [91 times (27.33%)], nonsteroidal anti-inflammatory drugs [86 times (25.82%)], analgesics [36 times (10.80%)]. Our drug prescribing habits have been close to those defined in the proposed standard optimum treatment. **Conclusion:** this study confirms that the therapeutic attitudes of our unit are rational because they are close to the standard optimal treatments proposed. Our work represents a tool of adequate approaches for health personnel who must opt for a rationalization of the treatment of common ENT conditions considering their clinical particularities in tropical environments.

Keywords— ENT conditions- medical treatment- rationalization.

I. INTRODUCTION

ENT drug therapy very often requires the combined prescription of a number of products depending on the symptoms found (1, 2, 3, 4, 5, 6).

Some rationalization of this therapy is necessary to better adapt it to the causal condition, considering the serious complications of certain ENT conditions common in tropical environments (7, 8, 9, 10).

Objectives

- Assess the habits of ENT drug prescription in an ENT unit of a reference health center in Mali.
- Propose the principles of a rationalization of the treatment of common ENT conditions of our unit.

Scope of the study

ENT Department, District IV Hospital of Bamako.

II. PATIENTS AND METHODS

The retrospective study identified the drug prescribing habits of common ENT conditions involving 110 patients consulted in our department during 2019.

All patients who received medication management after an informed diagnosis confirmed an ENT condition were included in the study.

Patients who did not have ENT organ disorders were excluded from the study.

A standard treatment has been proposed, selecting diseases based on the competency frameworks for common ENT diseases of our service (11).

Data entry and analysis was done using the software epi info7.

Statistical analysis was performed using the software epi info 7.

Ethical considerations: This study was conducted with the agreement of the administrators of the three health structures of the study. The informed consent of the patients was clearly verbal explained, always asked and obtained.

III. RESULTS

The mean age of patients was 26 years with extremes from 01 months to 76 years.

A predominance of female sex was noted: 59 cases (54%) versus 51 male patients (41%).

An optimal standard treatment was proposed taking into account the symptomatology of common ENT conditions of the unit (Table 1).

The three-drug prescription was mainly prescribed with 45 patients (48.39%).

A total of 333 drugs were prescribed throughout the study period (Table 2).

Pathologies requiring more prescription of products were: Acute pharyngitis -75 drugs (22.52), rhinosinusitis-68 drugs (20.42%) and acute otitis media- 68 drugs (20.42%).

The most used products were: antibiotic -91 times (27.33%), non-steroidal anti-inflammatory (NSAID)-86 times (25.82%) and analgesic 36 times (10.80%).

Were less prescribed: Steroidal anti-inflammatory drug-8 times (2.40%) and antihistamine-6 times (1.80%).

IV. COMMENTS AND DISCUSSION

Our results confirm the adequate approach of the prescribers of our service, because close to the standard medical treatments proposed, this factor is very important, considering the delicate therapeutic management of common ENT pathologies especially in a specific environment such as that of the tropical environment with its particular characteristics (lack of qualified staff, difficult climate, poverty, irrational self-medication, Misuse of drugs ...) (12, 13, 14, 15).

This is a first study in our country, there are practically no studies on the subject in our sub-region. Our work will revive our colleagues around the problem of drug prescription of patients suffering from disorders of the ENT sphere.

Our frequencies are consistent with those found by our colleagues in the West African sub-region (7, 8, 16, 17).

Age) The average age of our patients was 26 years, this confirms that ENT pathologies are especially predominant in young patients, and we must also take into account the fact that our country has a majority young population (10, 14).

Sex) The predominance of women 59 cases (54%), explains why this layer of the population, which is mostly unemployed, has more time to take care of its health and that of its children in families, unlike adult men (10, 14, 18).

Common ENT conditions) The pathologies found especially (acute pharyngitis, rhinosinusitis and otitis media), are those of the field of primary care ENT, therefore commonly encountered within our populations, and widely emphasized in many works in tropical environments (7, 8, 10, 12).

Our appreciation of prescribers' therapeutic attitudes is part of a quality approach for the ENT care provided in our department. This factor is important to consider for adequate patient care, especially with the multiplicity of prescribers, some of whom are poorly informed about the rationality of the therapy of ENT pathologies. Our study will serve as an example for other ENT services in our country. Our prescriptions in part were close to those defined according to the standard optimal treatment of ENT pathologies based on a synthesis of studies mentioned in the literature (Table 1) (11).

Our therapeutic attitudes show that, in part, patients who consult in our department generally benefit from medical prescription adapted to the common diagnosed ENT disease.

Prescribed drugs)

The predominance in prescribed drugs of antibiotics (27.33%) and nonsteroidal anti-inflammatory drugs (25.82%), rightly confirm the infectious etiology with an inflammatory starting point of the pathologies encountered in the patients of the study, as highlighted by some authors in tropical environment (7, 8, 16, 17).

The rationalization of drug treatments, the adequacy of treatment with the current disease makes it possible to avoid the occurrence of situations not favorable for the ENT health of our populations (poorly adapted treatment, too many drugs on prescriptions, partly unnecessarily prescribed, resistance of germs to usual antibiotics, chronicity of affections with evolution towards complications often vital for patients ...). Our study represents a no less important lever in the promotion of quality ENT care in our service and beyond in our country.

V. CONCLUSION

Thus the therapeutic attitudes of our unit can be considered rational because close to the standard optimal treatment. The relevant analysis of the results obtained makes it possible to correct inappropriate and ill-adapted treatments for certain clinical situations in our department for the benefit of patients.

This study constitutes a reference for an adequate medical prescription by the health worker in the field of ENT primary care at different levels of the health pyramid of our country; it is an important lever in the development of continuing education programs, especially for health personnel on the front line of the chain of care

TABLE 1. Optimal standard drug treatment for common ENT conditions

Pathologies	Standard Optimal Treatment
Banal pharyngitis	Local treatment (spray ...), anti-inflammatory and analgesic (oral).
Acute Tonsillitis	Antibiotic, anti-inflammatory, analgesic, local treatment.
Acute otitis media	Anti-inflammatory, analgesic, analgesic ear drops, oral and local antibiotic if suppurative phase.
Allergic rhinitis	Local and oral antihistamine or corticosteroid.
Uncomplicated rhinosinusitis	Local or oral antibiotic, nasal decongestant, antihistamine or corticosteroid, analgesic if pain.

TABLE 2. Drug prescriptions

Pathologies	Prescribed medications							
	(Number of products prescribed per pathology)							
	1	2	3	4	5	6	7	Total
Pharyngitis		5	8	1	1			15
Acute tonsillitis		4	13		1			18
Acute otitis media	1	3	14	3				21
Allergic rhinitis	10	2	2		1		1	16
Uncomplicated rhinosinusitis			8	15				23
Total	11(11.83%)	14(15.05%)	45(48.39%)	19(20.43%)	3(3.22%)	-	1(1.075%)	93

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