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OTOLOGIE

Clinical and microbiological profiles of malignant otitis externa : A case series from Tunisia

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Introduction

- Aggressive, rarely life-threatening infection of the bony external ear canal and surrounding structures .
- Fungal infection is increasingly recognized as a cause of MOE ,
- Antimicrobial drug resistance is being more frequent,

Objectives

- The aim of this study was to describe the clinical and microbiological profiles of a series of maligniant otitis externa and to define factors associated with fungal involvement and antimicrobial drug resistance.

Methods

- A Retrospective and descriptive study enrolling 90 patients with malignant otitis externe (MOE) was performed over a period of 4 years in the ENT department of La Rabta Hospital in Tunisia.

Results and discussion

Table 1 : Clinical and microbiological profiles

Mean age	67 years old [39-92 years]
Sex distribution	44 male -46 female
Diabetis	63 patients
Prehopsital oral treatment	70 patients
Prehospital topical treatment	85 patients
Average consultation delay	2,7 months
Complaint	Otalgia / otorrhea
Physical examination	Granulation tissue in the external auditory canal / facial palsy/Temporomandibular joint pain
CT Scan / MRI	All our patients /20 patients

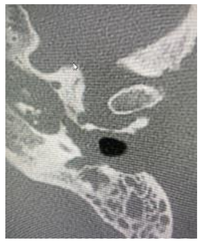

Fig 1: Mucocutaneous thickening of the external auditory canal walls

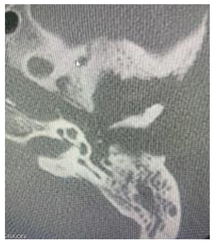

Fig 2: Left petrosphenoidal osteitis

Results and discussion

Positive swab	60 patients
Most commonly isolated germ	1-*Pseudomonas Aeruginosa* *2-Staphylococcus Aureus*
Fungal group VS Bacterial group	48 patients VS 42 patients
First line Treatment / average duration	Ciprofloxacin –ceftazidime /42 days
Recovery within 15 days	30 patients
Evolution	Favorable 60 patients

✓ Our study revealed **2 major microbiologic issues**:,

➢ **Fungal involvement** accounted for 52 % of the initial study population. It was assessed by positive fungal samples ,absence of improvement 2 weeks after the beginning of antibacterial treatment or symptoms and signs worsening despite of an initial improvement

→We found that unbalanced diabetes (p=0,03), inappropriate use of antibiotics before hospitalization (p= 0,044) were related to fungal infection

➢ **Bacterial drug resistance** rate was high .In fact, *Pseudomonas* species demonstrated intermediate sensitivity for ciprofloxacin and /or ceftazidime in 39% of cases ;resistance to ciprofloxacin was noticed in 5,5% of cases

→Bacterial resistance to fluoroquinolones was associated with repetitive fluoroquinolones prescription for infections of urinary or respiratory tract, insufficient dosage, long term ciprofloxacin monotherapy, and repetitive use of quinolone ear drops

Conclusion

- Prevention is important in case of MOE: efficient treatment of acute otitis externa and optimal control of risk factors such as diabetes are necessary
- Mistreatment in MOE should be avoided: repeated prehospital oral and topical treatment is harmful leading to the selection of resistant bacteria and facilitating fungal involvement , Drug prescription according to the results of antibiograms is mandatory

Références

- Trevino Gonzalez J L, Reyes Suarez L L, Hernandez de Leon J E. Malignant otitis externa: An updated review. Am J Otolaryngol. 2021;42:1-4.
- Mahdyoun P, Pulcini C, Gahide I, Raffaelli C, Savodelli C, Castillo L, Guevara N. Necrotizing otitis externa : A systematic review. Otol. Neurotol. 2013;34:620- 29.