

Malignant otitis externa caused by *Candida*

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Introduction

- Malignant otitis externa (MOE) is an invasive infection of the temporal bone that is classically caused by *Pseudomonas aeruginosa*. *Candida* was rarely involved in MOE and has been identified particularly in immunocompromised patients.
- The aim of this study was to describe the clinical characteristics and outcome of MOE caused by *Candida*.

Methods

- It is a retrospective study including all patients with diagnosis of MOE caused by *Candida* in an Infectious Diseases department between 1990 and 2013. The diagnosis was based on a combination of clinical finding, biological and radiological investigations.

Results

- We identified 13 cases of MOE caused by *Candida* (Figure1).
- The mean age was 68.7 ± 12 years.

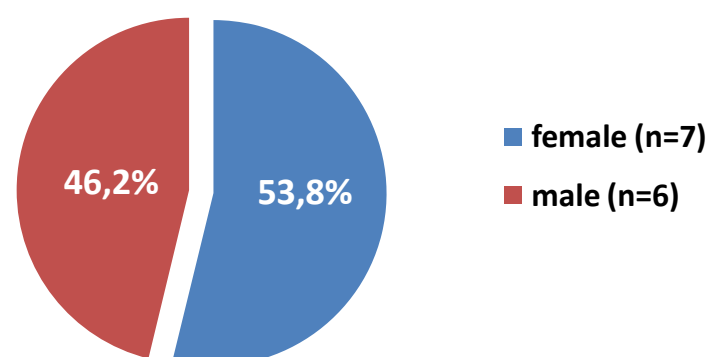


Figure 1: Gender distribution

- The predisposing factors of MOE was essentially diabetes (100%) and age greater than 65 (46%) (Table1).

Table 1: Predisposing factors for MOE

Predisposing factors	Number	Percentage (%)
Diabetes	13	100
Age > 65 years	6	46
Auricular Steroides	5	38.4

The clinical manifestations were summarize in Table2.

Table 2: Clinical manifestations

Clinical manifestations	Number	Percentage (%)
Otalgia	12	92.3
Othorrhoea	8	61.5
Headache	6	46
Fever	6	46
Facial paralysis	1	7.7

- Granulation tissue at the external auditory canal was found in 5 cases (38.4%) .
- Nine patients (69.2%) had bone erosion on computed tomography.
- The pathogens isolated in culture of ear sample were essentially *Candida parapsilosis* in 61.5% and *Candida albicans* in 30.7% of cases (Table 3).

Table 3: Pathogens isolated in culture of ear samples

Pathogens	Number	Percentage (%)
<i>C. Parapsilosis</i>	8	61.5
<i>C. Albicans</i>	4	30.8
<i>C. Kursei</i>	1	7.7

- **Laboratory findings** included a blood glucose levels exceeding 11 mmol/l in 10 cases (77%) and an inflamatory syndrom in 7 cases (54%).
- Our patients were treated with **Fluconazol** in 11 cases (84.6%) and **Voriconazol** in 2 cases (15.4%).

- No therapeutic changes were indicated for adverse effects.
- The mean duration of antifungal treatment was 58 ± 28 days.
- **Oral analgesics** are administered in all cases .

- Favorable outcome is occurred in 11 cases (84.7%) (Table 4) .

Table 4: The evolution modalities' of MOE

Evolution modalities	Number	Percentage (%)
Healing	10	77
mortality	2	15,3
Sequelae (hypoacusia)	1	7,7

Conclusion

- MOE caused by *Candida* affected mainly elderly patients with diabetes. A multidisciplinary care is needed, based on appropriate antifungal use and good blood sugar control.