

S. Ferchichi, G. Kharrat, M. Ferjani, K. Bouziane, Z. Jouini, A. Azaiez, K. Charrada, S. Mansour, R. Ben Hamouda, K. Ayachi
ENT department - Mohamed Thaer Maamouri Hospital - Nabeul - Tunisia

Abstract

Fungal necrotising otitis externa is a rare potentially life-threatening disease. It affects **immunocompromised** patients and has serious outcomes. Mycological analysis of auricular samples and CT scan of the temporal bone are fundamental for the diagnosis. This work aims to analyse its epidemiological, diagnosis and therapeutic aspects in order to prevent its complications, particularly **neurological** ones, that may arise from delayed or inadequate treatment.

Objectifs

Identify the various clinical features of necrotizing fungal otitis externa and adjust the treatment accordingly.

Méthodes et Matériels

It is a **retrospective** study analysing **35 cases** of **fungal necrotising otitis externa**, managed at the department of ENT and Head and Neck surgery of Mohamed Taher Maamouri Hospital over the past 5 years (2018-2022).

Résultats

The study concerns 35 patients, **mean age** was 70,2 years old with a **sex ratio** of 0,61.

* **History:** 33 patients with **diabetes**, 1 under **longterm corticosteroid therapy** and 1 was **HIV positive**.

* **Main Symptoms:** otalgia and otorrea (35 cases).

* **Clinical examination:** narrowed and inflammatory external ear canal and otorrea in all cases with granulation tissue and polyps in 10 cases. Association with **peripheral facial paralysis** in 8 cases.

* **Imaging:** CT scan of temporal bone for all patients : osteolysis of the tympanic bone (29 cases) (Fig 1 & 2).

Résultats

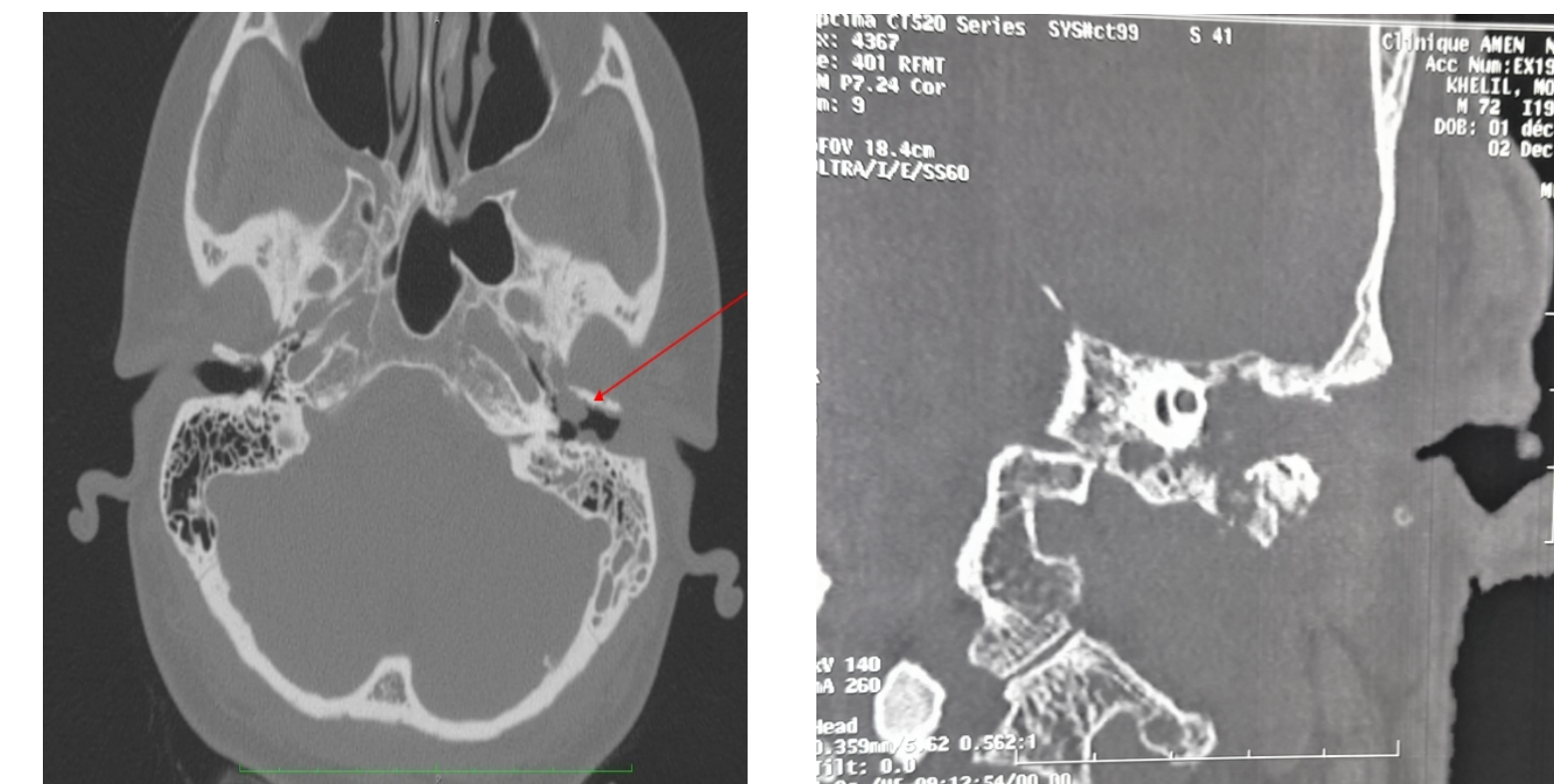


Fig 1 & 2: CT scan of the temporal bone showing lysis of the tympanic bone (red arrow)

- * **Initial evolution:** lack of improvement or an improvement followed by relapse
- * **Repeated sampling** (35 cases) after a therapeutic window of 48 hours -> positive in 20 cases
- * **Aspergillary antigenemia** and **aspergillary serology** (30 cases) -> positive in 13 cases
- * **Bone biopsy:** histological/ mycological diagnosis (1 case) (Chart 1)
- * **Treatment:** **voriconazole** for all 35 patients
- * **Final results:** healing in 34 cases (with 2 relapses after 2 year followup) and death due to renal failure in one case.

* **Bacteriological and mycological samples:**

- Bacteriological samples: negative (32 cases), p. Aeruginosa (2 cases) k. Pneumoniae (1 case)

- Mycological samples negative (35 cases)

—> Probabilistic antibiotherapy combining **ceftazidim + ciprofloxacin**

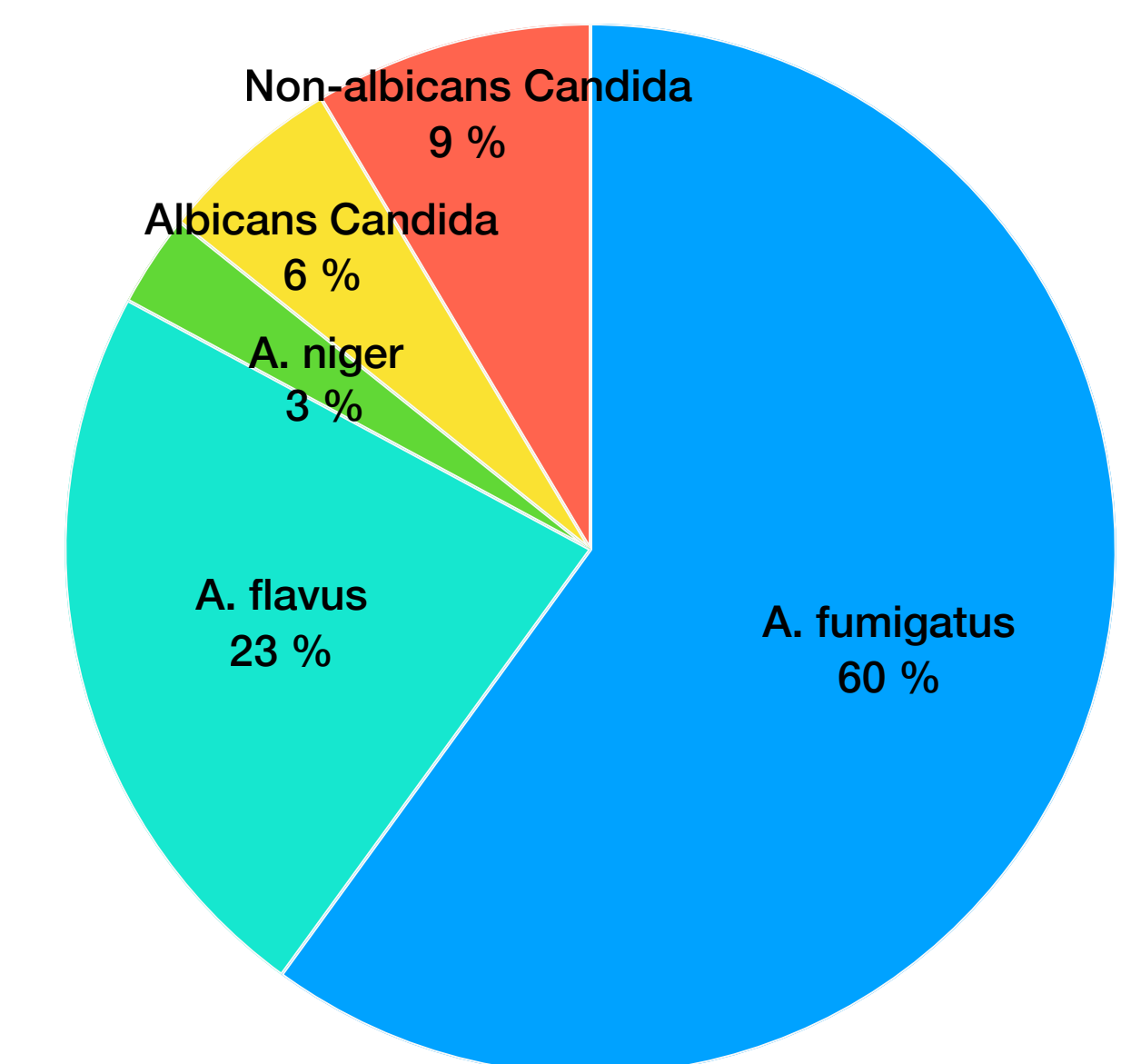


Chart 1: Identified fungi in the mycological investigation

Conclusion

Fungal Otitis should be considered in the presence of any slow-onset, antibiotic-resistant otitis in an immunocompromised patient. The earlier the diagnosis is made, the better the prognosis.

Références

Kesser B. W. (2024), University of Virginia School of Medicine, Otite externe maligne, Le Manuel MSD