

**TITLE:** OTITE EXTERNAL FUNGAL IN PATIENT SUBMITTED TO TIMPANOPLASTY

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**ABSTRACT:**

Otomycosis consists of fungal infection of the external auditory canal (EAC), in which fungal otitis accounts for up to 25% of infectious otitis. *Aspergillus* species are predominant in the etiology of this mycosis, representing up to 90% of the cases. Although non-specific, the main symptoms of otomycosis are otorrhea, pruritus and otalgia. Several factors predispose the development of this infection, among them tympanic membrane perforation and tympanoplasty. These conditions are usually accompanied by an inflammatory process of the middle ear, from which a continuous drainage of secretion to the CAE occurs, which in these cases, recurrence of fungal infections is frequent. Therefore, this study aimed to report a case of fungal otitis in a patient with tympanic membrane perforation who underwent tympanoplasty. A 31-year-old male, cultivator was attended at the Otorhinolaryngology Clinic of the Hospital das Clínicas / UFPE. After 30 days of tympanoplasty, the patient reported episodes of otorrhea. Treatment with Otosporin® has been instituted. After the treatment was finished, yellowish secretion and fungal structures were observed in the CAE during otoscopy. After the clinical examination, samples of CAE secretion were collected with swab and sterilized distilled water added with 50mg/L chloramphenicol and sent to the Medical Mycology Laboratory Silvyo Campos, from the Biosciences Center of the Federal University of Pernambuco. The biological material was processed fresh, and seeded in Petri dishes containing Sabouraud dextrose agar added with 50mg/L chloramphenicol, maintained at 30°C and 37°C for 20 days. The fungus was isolated and identified through the classical taxonomy through micro and macromorphological characteristics, and molecular tools. On direct examination of the secretion, the presence of numerous mycelial filaments, hyaline, septate, dichotomy was observed, and treatment with Daktarin® (ketoconazole) was instituted for 10 days. After the culture analysis, *Aspergillus fumigatus* was identified as the etiological agent of CAE fungal otitis. It is known that perforation of the tympanic membrane promotes episodes of fungal otitis, and *Aspergillus* species are the main etiological agents responsible for most cases of recurrence, and clinical monitoring and mycological laboratory diagnosis are important for therapeutic choice.

**Keywords:** *Aspergillus fumigatus*, mycological diagnosis, otomycosis.

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