
OBJECTIVE: To investigate the clinical characteristics and outcome of fungal malignant external otitis (MEO). METHODS: The files of 60 patients treated for MEO in 1990-2008 at a tertiary medical center were reviewed for clinical characteristics and outcome, and findings were compared between patients with fungal and nonfungal infection. RESULTS: Mean duration of follow-up was 4 years. Nine patients (15%) had fungal disease; the main pathogen was Candida spp. Compared with the nonfungal MEO group, patients with a fungal infection were younger at diagnosis (average 68 vs. 74 years, p=0.01) and had more facial nerve palsies (55% vs. 14%, p=0.01), fewer positive bacterial cultures at presentation (33% vs. 75%, p=0.02), and higher rates of surgery (78% vs. 18%, p=0.0008) and hyperbaric treatment (78% vs. 4%, p=0.0001). Eighty-nine percent had persistent infection (>2 courses of systemic antibiotics before antifungal treatment) compared with 12% in the nonfungal group (p=0.0001). Fungal disease was associated with more persistently positive imaging findings (87.5% vs. 25%, p=0.0001). There was no significant between-group difference in survival.

CONCLUSION: Fungal MEO probably occurs secondary to prolonged antibiotic treatment for bacterial MEO. The fungal disease is more invasive than the bacterial disease, although survival is the same. Treatment should be aggressive and hyperbaric oxygen therapy should be considered.