

**TRANSCUTANEOUS RETROBULBAR AMPHOTERICIN B INJECTION
TREATMENT FOR INVASIVE FUNGAL RHINO-ORBITAL SINUSITIS - A CASE
REPORT**

Margarida Ferreira¹, Rita Rodrigues¹, Fernando Falcão-Reis^{1,2}, Vítor Leal¹, Jorge Meira¹

¹*Department of Ophthalmology, Centro Hospitalar Universitário São João, Portugal*

²*Surgery and Physiology Department, Faculty of Medicine, University of Porto, Portugal*

PURPOSE: Invasive fungal rhino-orbital sinusitis is a rare and life-threatening condition that occurs in immunosuppressed patients. This article aims to describe the case of a patient with mucor involving both orbits, submitted to right orbital exenteration and transcutaneous retrobulbar amphotericin B in the left orbit.

METHODS: Clinical and imaging description of a clinical case.

RESULTS: A 61-year-old diabetic woman, immunosuppressed due to treatment with hormonotherapy for breast cancer and systemic corticosteroid for sarcoidosis, admitted to our hospital with the diagnosis of rhino-orbital mucormycosis with intracranial extension. Imaging exams demonstrated right orbital apex involvement with extension to frontal cerebral space and an inflammatory swelling in the medial aspect of the left orbit with extra-conical extension. Initial treatment included systemic antifungal therapy and necrotic tissue debridement, both encephalic and nasosinusal. Since there was a complete right orbital apex and optic nerve involvement, she was proposed to right orbital exenteration, despite definite survival benefit has not been demonstrated. The left eye presented good visual acuity (8/10 on Snellen chart) and no signs of afferent or efferent pathway involvement. Since there was a left orbital soft tissue involvement, this patient was proposed to a modified therapy consisting of transcutaneous retrobulbar injection of 1 mL of amphotericin B at a concentration of 3.5mg/mL. She received a total of 3 injections to this date, with clinical stability and imagiologic signs of improvement.

CONCLUSION: Transcutaneous retrobulbar injection of amphotericin B seems to be a valid approach for specific cases of rhinosinus mucormycosis with orbital invasion.