

Survival of rhino-orbital-cerebral mucormycosis in SARS-COV-

C. Lädach¹, Martin Wartenberg², S. Zimmerli³, Lukas Anschuetz¹, S. Bohlen⁴, J. Ebner⁵,
C. M. F. de Gouyon Matignon de Pontouraude⁶, Marco Caversaccio¹, and Franca Wagner⁷

¹Inselspital Universitätsspital Bern Universitätsklinik für Hals- Nasen- und
Ohrenkrankheiten Kopf- und Halschirurgie

²Universität Bern Institut für Pathologie

³Inselspital Universitätsspital Bern Universitätsklinik für Infektiologie

⁴Inselspital Universitätsspital Bern Universitäres Notfallzentrum Erwachsene

⁵Inselspital Bern University Hospital

⁶Inselspital Universitätsspital Bern Universitätsklinik für Augenheilkunde

⁷Inselspital Universitätsspital Bern Universitätsinstitut für Diagnostische und
Interventionelle Neuroradiologie

November 27, 2023

Abstract

Rhino-orbital-cerebral mucormycosis (ROCM) is a rare angioinvasive fungal infection known to be associated with high morbidity and over 50% mortality and has increased lately due to increasing predisposing immunocompromising comorbidities as well as COVID-19. In addition to the common acute disease progression, chronic less aggressive courses have been described less often. In this paper we report two cases – a 75-year-old woman with diabetes and a 39-year-old man with recurrent diabetic ketoacidosis. Both presented initially with acute sinonasal symptoms, were positive for SARS-COV-2 and later diagnosed with acute ROCM. Both underwent mutilating surgical therapy as well as high administered dose Amphotericin B and long term continuous antifungal therapy. Patient 1 showed stable symptoms with radiographically increasing disease and died of urosepsis 5 months after first surgery. Patient 2 was first lost to follow-up after repatriation to his home country and 1 year later sent us a holiday picture of himself, having recovered from the disease.

Key words:

Rhino-orbital-cerebral mucormycosis, mucormycosis, Amphotericin-B, COVID-19, invasive fungal infection