

Challenges faced in managing the rhino-cerebral mucormycosis (RCM) during COVID-19 pandemic in resource limited settings

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Introduction:

- Rhino-cerebral mucormycosis is a rare, potentially fatal, opportunistic fungal infection
- Early diagnosis, extensive surgical debridement, prolonged antifungal therapy, and control of underlying co-morbidities are essential for favorable outcome

- All 5 patients had COVID-19 pneumonia and had received steroid within 3 months prior to onset of RCM
- Three had poor glycaemic control
- All presented with localising symptoms like headache, visual changes, proptosis, and cranial nerve palsies

Diagnosis:

All the patients were commenced on Amphotericin B based on clinical suspicion

CT scans: showed paranasal sinus involvement, with or without evidence of intracranial extension

Rigid nasal endoscopy: evidence of tissue destruction with fungal debris

MRI scans: Confirmation of initial diagnosis and extent of disease

FESS: Histological and Microbiological diagnosis

Outcome:

3 patients recovered with surgical interventions and antifungal treatments and 2 patients died

- The limited availability MRI scans results in delay in confirming the diagnosis
- Facilities for fungal cultures and anti-fungal sensitivity testing are not available on site, hence result in further delays
- No newer antifungals available for combination and inadequate facilities for therapeutic drug monitoring