

ORIGINAL RESEARCH**Clinical Management of Mucormycosis (Fungal Emergency) (Early identification and diagnosis)****¹Ravinder Kaur, ²Priyanka Chaudhary, ³Damandeep Kaur**¹Lecturer (OBG), ²Associate Professor (MSN), Desh Bhagat University, Mandi Gobindgarh, Punjab, India³Registered Practical Nurse in Spectrum Health Care, Mississauga Ontario, Canada**Correspondence:**

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Abstract

Polymorphic disease, caused by fungi classified under the order *Mucorales*, often considered a fungal emergency. Often leads to devastation by causing thrombosis, infarction and necrosis in vital organs like the nose, eyes, brain etc. Usually thrive in decaying organic matter like fruits, vegetables and soil -which shows their ubiquitous nature. Generally acquired through “inhalation of spores”, Commonest type Rhino-orbital-cerebral type followed by pulmonary and cutaneous types

Keywords- Polymorphic, disease, fungi, devastation, thrombosis, infarction, necrosis, decaying, ubiquitous, spores.

Incidence

Reported in patients with hematological malignancies, transplant recipients on chemotherapy, iron overload, malnutrition, patients with uncontrolled diabetes (a big group of patients susceptible to this fungus special in India) and post covid patients who have used high doses of Steroids and oxygen.

Clinical presentation early stage

Headache or facial pain, fever, stuffy nose, dental pain Pallor on fungal examination.

Clinical presentation intermediate stage

Facial swelling, skin discoloration of nose, face, nasal discharge, eye pain, exudation seen on endoscopy.

Clinical presentation late-stage

Eye problem- swelling of the eyes, loss of vision, restricted eye movement, hole in the palate, inability to open the eye. Others- confusion, seizures, loss of consciousness, Stroke.

Imaging

Magnetic resonance imaging (MRI) of the nose, paranasal sinuses, orbit and brain with contrast is required and should be ordered. CT scan shows erosion of bones but does not give sufficient information of soft tissue.

Treatment

Aggressive surgical debridement, control of underlying medical conditions- for example Diabetes mellitus, anti-fungal medications liposomal amphotericin B, posaconazole, regular follow up- imaging and repeat endoscopy.

Treatment challenges

Suspicion of the disease- high degree of suspicion as required. Collection of material from deep tissues, aggressive nature of the disease, availability of anti-fungals, expensive medications. Successful management of mucormycosis requires early diagnosis, reversal of underlying predisposing risk factors, surgical debridement and prompt administration of active antifungal agents. However, mucormycosis is not always amenable to cure.

Reference

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