

Government of West Bengal
Department of Health and Family Welfare
Swasthya Bhawan
GN-29 Block, Sector- V, Bidhannagar, Kolkata-91

Memo No : HPH/9M - 21/2020/ Part - II /136

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GENERAL ADVISORY ON MUCORMYCOSIS

➤ **Mucormycosis - if uncared for - may turn fatal**

Mucormycosis is a fungal infection that mainly affects people who are on medication for other health problems that reduces their ability to fight environmental pathogens.

Sinuses or lungs of such individuals get affected after fungal spores are inhaled from the air.

This can lead to serious disease with warning sign and symptoms as follows:

- Pain and redness around eyes and/or nose
- Fever
- Headache
- Coughing
- Shortness of breath
- Bloody vomits
- Altered mental status

➤ **What predisposes**

- Uncontrolled diabetes mellitus
- Immunosuppression by steroids
- Prolonged ICU stay
- Co-morbidities - posttransplant/malignancy
- Voriconazole therapy

➤ **How to prevent**

- **Control Diabetes**
- Mask is to be used strictly and properly, special emphasis during visit to dusty construction sites.
- Wear shoes, long trousers, long sleeve shirts and gloves while handling soil (gardening), moss or manure
- Maintain personal hygiene. Thorough scrub bath is recommended.
- Environmental cleanliness to have no **exposure to decaying organic matters** like breads/fruits/vegetables/soil/compost/excreta/etc
- **Optimal steroid usage** -right timing of initiation, right dose, and right duration
- Use clean distilled water for humidifiers during oxygen therapy

➤ When to Suspect (Uncontrolled Diabetes In Covid -19 patients or Immunosuppressed Individuals)

- Sinusitis - nasal blockade or congestion, nasal discharge (blackish/bloody), local pain on the cheek bone
- One sided facial pain, numbness or swelling, Blackish discoloration over bridge of nose/palate.
- Toothache, loosening of teeth, jaw involvement
- Blurred or double vision with pain; fever, skin lesion; thrombosis & necrosis (eschar)
- Chest pain, pleural effusion, haemoptysis, worsening of respiratory symptoms

➤ Do's

- Monitor blood glucose level post COVID-19 discharge and in diabetics
- Regular examination to find any warning signs
- Use steroid **judiciously**
- Use antibiotics/antifungal judiciously

➤ Don'ts

- Do not consider all the cases with blocked nose as cases of bacterial sinusitis, particularly in the context of immunosuppression and /or Covid -19 patients.
- Do not hesitate to seek aggressive investigations, as appropriate (KOH staining & microscopy, culture, for detecting fungal etiology.
- Do not lose crucial time to initiate treatment for mucormycosis.

➤ How to manage

- Strict diabetes and diabetic ketoacidosis control
- Reduce steroids with aim to discontinue rapidly
- Discontinue immunomodulating drugs
- No antifungal prophylaxis needed
- Extensive Surgical Debridement - to remove all necrotic materials. (An area of multi disciplinary approach)
- Medical treatment
- Install peripherally inserted central catheter(PICCline)
- Maintain adequate systemic hydration
- Infuse normal saline, IV before Amphotericin B infusion.
- Antifungal Therapy, for at least 4-6 weeks (see the guidelines)
- Monitor patients clinically and with radio-imaging for response and to detect disease progression

➤ **Team Approach works best**

- Radiodiagnosis expert
- Internal Medicine Specialist / Intensivist
- Infectious Disease Expert
- Specialist ENT
- Specialist Neurologist
- Ophthalmologist
- Dental surgeon
- Surgeon(maxillofacial/plastic)
- Endocrinologist

Dm 21/07/21

**Director of Medical Education
West Bengal**

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**Director of Health Services
West Bengal**