

INCIDENCE OF SINO NASAL MUCORMYCOSIS IN ACTIVE & POST COVID- 19 PATIENTS AT A DISTRICT LEVEL HOSPITAL – A PROSPECTIVE STUDY

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Abstract

Objective: To study the incidence of sinonasal mucormycosis in active and post COVID-19 patients in a district-level hospital in India. **Study Design:** A prospective, interventional cohort study conducted from April 2021 to January 2022. **Setting:** A district-level/secondary level hospital in North India. **Methods:** Inclusion Criteria: All COVID-19 positive patients with diabetes mellitus as co-morbidity and with at least one of the following:received steroid therapy and/or on high flow oxygen therapy and/or had prolonged hospital stay (>7 days). **Exclusion Criteria:** Patients already immunocompromised/having malignancy/organ transplant recipients. **Clinical workup:** History, examination, imaging (CECT/MRI nose and paranasal sinuses if indicated), diagnostic nasal endoscopy + Nasal scrapings for KOH mount to detect fungal elements. **Results:** Fourteen out of 250 patients tested positive for Mucormycosis (incidence 5.6%). Out of these 13 were symptomatic and only one patient was asymptomatic and detected on screening. No significant difference was found in mucormycosis vs. non-mucormycosis group with respect to HbA1c status, vaccination status or steroid + oxygen treatment ($p>0.05$ in all scenarios). Patients were treated with intravenous Liposomal Amphotericin B and surgical debridement when indicated. Two succumbed to disease (survival 85.7%). A clinical screening protocol was thus developed which can be used as an effective tool even at far-flung and remote healthcare facilities for diagnosis and timely referral of patients. **Conclusion:** Mucormycosis is a potentially lethal disease which needs rapid diagnosis and timely action to decrease morbidity and mortality.

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