

A STUDY ON RHINO-ORBITAL MUCORMYCOSIS ETIOPATHOGENESIS, RISK FACTORS AND MANAGEMENT

ABSTRACT

BACKGROUND

Mucormycosis is a rare, potentially fatal, opportunistic fungal infection. Rhino-orbital mucormycosis is the most common manifestation. In this study, we analyse the demographic features, risk factors, etiopathogenesis, clinical features, investigations, management and outcome of the same.

METHOD AND METHODOLOGY

A prospective, observational study was done including 50 patients of histologically proven rhino-orbital mucormycosis who presented to the Department of Otorhinolaryngology, Madras Medical College and Rajiv Gandhi Government General Hospital. Detailed history and examination was done. All the patients were subjected routine investigations, diagnostic nasal endoscopy, radiological investigations and histopathology investigations. Both medical and surgical management was done. Outcome was measured as survival rate. The patients were followed up for 6 months. All the data was recorded and analysed.

RESULTS AND ANALYSIS

Of the 50 patients, 24 presented in rhino-maxillary stage, 24 in rhino-orbital and 14 in rhino-orbito-cerebral stage. Mean age was 50.28years. 58% were male. 66% presented as an acute fulminant illness. Nasal obstruction, headache and decreased sensation were the most common complaints. Diabetes Mellitus was the most common underlying factor present in 44 patients. Diabetic ketoacidosis was present in 17 patients and electrolyte imbalance in 18. Eschar was present in 38 patients. Lack of sensation and lack of bleeding was present in 90% of the patients. In radiology, retromaxillary

attenuation of soft tissue and fat plane stranding was present in 78%. Control of immunosuppressive state, antifungal therapy and Multiple Surgical therapy was the main treatment strategy. Outcome in our study was 90%.

CONCLUSION

Glycemic control rather than the presence or duration of diabetes is the key factor. Reversal of immunosuppression, antifungal therapy and multiple surgical therapy are the main strategies that lead to a better survival state.

KEY WORDS

Rhino-orbital mucormycosis, amphotericin B, Diabetic ketoacidosis, Endoscopic debridement.