Case Series :

Intracranial Mass Lesion due to Fungal Infection: a Case Series and Review of the Literature

Ashok Gandhi[1], Surendra Jain [2*], Sapna Gandhi[3], Keshav Mishra[4], Shashi Kant Jain[5]

1. MS General Surgery, MCh Neurosurgery, Professor, Department of Neurosurgery SMS Medical College, Jaipur, Rajasthan, India
2. MCh Neurosurgery, Assistant Professor, Department of Neurosurgery SMS Medical College, Jaipur, Rajasthan, India
3. MD Pathology, Associate Professor, Department of Pathology SMS Medical College, Jaipur, Rajasthan, India
4. MS General Surgery, Senior Resident (MCh) department of Neurosurgery SMS Medical College, Jaipur, Rajasthan, India
5. MCh Neurosurgery, Senior Professor, Department of Neurosurgery SMS Medical College, Jaipur, Rajasthan, India

Citation: Gandhi A , Jain S, Gandhi S, Mishra K, Kant Jain Sh. Intracranial Mass Lesion due to Fungal Infection: a Case Series and Review of the Literature. Iran J Neurosurg. 2020; 6(3)

ABSTRACT

Background and Importance: Fungal infections of the central nervous system (CNS) usually present as subacute meningitis or intracranial space-occupying lesion with mass effect on surrounding structures and consequent focal neurological deficits. Intracranial fungal granulomas are often misdiagnosed clinically and radiologically as neoplastic lesions. Biopsy of the lesion is the only reliable technique to establish the correct diagnosis as well as to detect the causative fungal species. Voriconazole is a broad-spectrum triazole antifungal agent. It can be given orally and intravenously and has lesser adverse effects. **Methods and Materials:** In this article, we report a series of 6 cases of biopsy-proven fungal granuloma with varied clinical and radiological presentations who were given treatment with voriconazole for 6 months and demonstrated favorable response. **Results**: Out of 6 patients (4 males and 2 females), 1 was immunocompromised (DM with uncontrolled hyperglycemia). Headache was the most commonly observed symptom. Paranasal sinus and anterior cranial fossa were the most commonly affected site. Four patients received voriconazole therapy for 12 months and 1 received the same for 6 months before showing clinical resolution of disease. There was 1 death in the study group from non-related medical complications. **Conclusion:** Our series focuses on the correct diagnosis of fungal granuloma which can be achieved by biopsy and clinical evidence of the efficacy of voriconazole against intracranial fungal granuloma.

Article info:
Received: XX
Accepted: XX
Available Online: XX

Keywords:
Voriconazole, Fungal granuloma, Biopsy

*Corresponding Author:
Surendra Jain, MD, Assistant Professor
Department of Neurosurgery, SMS Medical College Jaipur, Rajasthan, India. 302004
Tel: +919587343460. E-mail: simplesogani@gmail.com