Case Report

TAPI Journal Vol. 14, Issue1, January – April 2020

Mucormycosis in Lupus- Unusual!

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Abstract

SLE is a multisystem disease with immunological derangement and needs immune modulatory treatment. Hence patients with SLE are susceptible to various infections.However opportunistic infections are rare. Cyclophosphamide is commonly used for renal and cerebral lupus. Mucormycosis occurs in patients with HIV or transplant recipients or patients with diabetes. We present this patient who had SLE and renal disease, thereby given cyclophosphamide but picked up mucormycosis of a nasal sinus. This case not only posed a diagnostic and therapeutic challenge but had a very good outcome with a multi-disciplinary treatment approach.

Case history

A 23-year-old MCA graduate was admitted with fever, rash, mouth ulcers and fatigue. She also complained of leg swelling withno cough or diarrhea. She didn't have joint pain.

Examination showed few mouth ulcers, hyperpigmented urticarial type rash in the face and hands, tender knee joint, palpable spleen and pedal edema.

Her fever workup showed raised ESR and CRP, but the viral profile was negative. Her CBC showed mild anemia and lymphopenia. Hence Lupus was thought of.

Investigations

Immunology showed ANA 1 in 2560 positive, homogenous, Sm and RNP positive and ds DNA 1in 160 positives. USG of the abdomen showed splenomegaly. Urine showed 3+ proteinuria and PCR was 3.4. Renal Biopsy showed class IV lupus nephritis.

Treatment

She underwent steroid induction and then cyclophosphamide NIH protocol for nephritis. She was also on Hydroxychloroquineand oral steroids.

Outcome: After 4 days of cyclophosphamide therapy, she developed a fever and blocked nose. Nasal endoscopy showed a nasal mass. Hence CT scan was taken showing a mass in the sinuses. Fungal infection was thought of as she had received immune-modulatory drugs. Nasal endoscopy biopsy confirmed that it was mucormycosis.

She underwent endoscopic debridement and the full course of Amphotericin. For lupus, she was started on mycophenolate and steroids. She achieved remission and currently on hydroxychloroquine, Mycophenolate and steroids.

Learning points

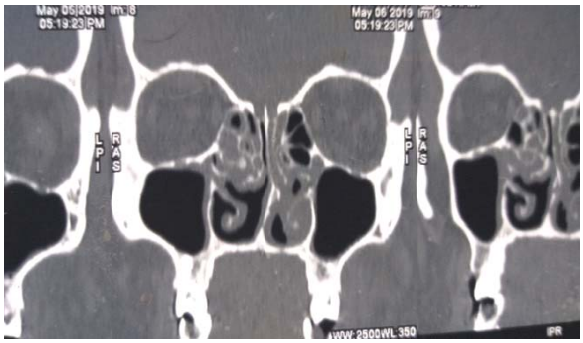
1. SLE and Infection are like a double-edged sword.
2. In patients with SLE and immune-modulatory therapy, opportunistic infections need to be considered.
3. Nasal mucormycosis needs a high index of suspicion during evaluation.

Discussion

Mucormycosis is emerging as the third most common cause of fungal infections after Candida and aspergillosis in patients with diabetes, stem cell transplant, neutropenia, and trauma. Nasal or sinusoidal Mucormycosis is unusual in

patients with SLE and has been described in a patient with long use of steroids. In our case, she has had induction therapy and cyclophosphamide one dose, which may be the cause of this mucormycosis.

Aggressive surgical and antifungal intervention with early diagnosis and good compliance with the treatment contributed to a very good outcome.



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