Images in Clinical Medicine



Granulomatous invasive fungal sinusitis

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A35-year-old male presented with right-sided nasal obstruction with protrusion of his eyeball for 4 months. There was no history of trauma, fever, allergy, or previous nasal surgery. On examination, a bulge was seen in the right middle meatus along with proptosis of the right eye, the vision was, however, normal. Computed tomography (CT) scan revealed a heterogeneous mass in the right nasal cavity with erosion into the right orbit [Figure 1]. The mass was debrided endoscopically, and postoperative biopsy revealed granulomatous tissue composed of lymphocytes, Langerhans giant cells, histiocytes, and fibrocytes with fungal septate hyphae suggestive of chronic granulomatous fungal lesion [Figure 2]. The patient was subsequently started on itraconazole 200 mg twice a day for 12 weeks and is asymptomatic at 5 months of follow-up.

Chronic granulomatous invasive fungal sinusitis is a relatively rare entity, mostly affecting immunocompetent individuals. Most patients are asymptomatic; others present with slowly progressive headache, facial pain, proptosis, and neurologic changes as a result of intraorbital and intracranial extension and these features closely resemble a sinonasal malignancy. The disease is endemic in Sudan and South Asia, with the most



Figure 1: Computed tomography scan showing a heterogeneous lesion in the right nasal cavity extending into the right orbit

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common causative organism being *Aspergillus flavus*. CT scan shows a homogeneous appearing consolidation with concomitant bony erosion. Magnetic resonance imaging scan is helpful in identifying invasion into the orbit or cranium. Treatment includes surgical endoscopic debridement and long-term administration of antifungals such as voriconazole or itraconazole.

Declaration of patient consent

The authors certify that the patient has obtained appropriate patient consent form. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understood that his name and initial will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.



Figure 2: Histopathology showing aggregates of lymphocytes, histiocytes and many giant cells with fungal hyphae (arrow) (H and E, ×40)

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