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Images in Infectious Diseases

Pott's puffy tumor secondary to frontal sinusitis

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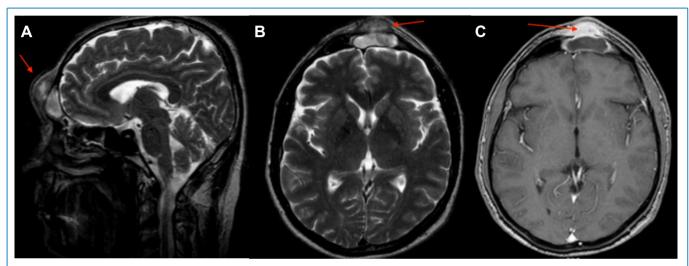


FIGURE 1: Pott's puffy tumor in the frontal sinus (arrows) on the sagittal (A) and axial (B,C) cranial MRI scans.

A previously healthy 54-year-old man presented with a two-week history of forehead swelling. He complained of a fever above 38°C and night sweats. He was admitted to the otolaryngology clinic for further examination, and consultation at the Infectious Diseases Clinic was requested. Physical examination showed a body temperature of 38.3°C and firm hyperemic swelling in the midline forehead measuring 5 cm × 5 cm. Laboratory studies revealed a white blood cell count of 11000/mm³ and a serum C-reactive protein level of 10.4 mg/L.

Magnetic resonance imaging showed a mass in the frontal sinus, 40 mm x 24 mm in size, that was consistent with a diagnosis of Pott's puffy tumor secondary to sinusitis of the left frontal sinus (Figure 1). The patient was treated with ampicillin-sulbactam and metronidazole. The patient underwent surgery for abscess drainage

and necrotic tissue removal. No pathogens were detected in the surgical specimens. Following a seven-day course of treatment, the patient was discharged on scheduled oral antibiotic therapy.

Although Pott's puffy tumor usually occurs as a complication of acute or chronic frontal sinusitis, it may also be associated with frontal bone trauma, intranasal cocaine use, fungal infections, history of cranioplasty, insect bites, acupuncture, or frontal sinus mucoceles. It may develop either through direct infection spread, as was the case in our patient, or through venous drainage of the frontal sinus^{1,2}. The diagnosis should be confirmed using imaging modalities². Early treatment is necessary to avoid serious complications³. Parenteral broad-spectrum antibiotic therapy and surgical removal are the primary therapeutic approaches.

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