

Pott's Puffy Tumor in a Six-Year-Old Female

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A 6-year-old girl with a history of bilateral myringotomies, tonsillectomy, and adenoidectomy 6 and 8 months prior, presented with forehead swelling. Eight days prior, she developed right ear pain, sore throat and fever followed by

eye pain and headache for which she was evaluated and diagnosed with viral illness. On the day of presentation she awoke with forehead swelling, persistent headache, and recurrent fever.

On exam she was afebrile. Central forehead swelling was noted without overlying erythema or fluctulence (Figure 1). Neurologic exam was normal. Noncontrast computed tomography (CT) scan of the head showed pansinusitis with an extra-axial fluid collection in the left frontal region (Figure 2).

Vancomycin, ceftriaxone, and metronidazole were started empirically. She underwent bilateral maxillary antrostomy, total ethmoidectomy, and burr-hole evacuation of the epidural abscess. Operative specimen cultures grew out *Group A streptococci*, after-which antibiotic therapy was narrowed down to ampicillin/sulbactam alone.

Pott's puffy tumor, or osteomyelitis of the frontal bone with subperiosteal abscess formation, is rare in children less than 7 years of age and usually the result of a delay in diagnosis or inadequate treatment of rhinosinusitis.¹ Risk factors include frontal sinusitis, head trauma, and less commonly, cocaine use, dental infection, or delayed neurosurgical or sinus surgery complications.^{2,3} Fever, vomiting, forehead



FIGURE 1. Central forehead swelling.

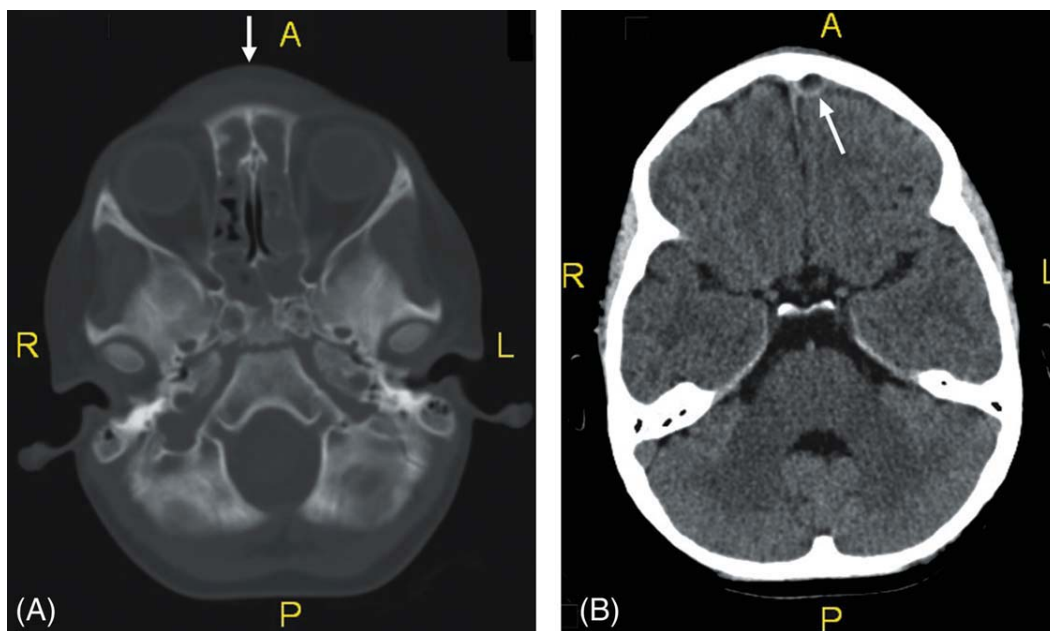


FIGURE 2. A: Computed tomography of the head, central forehead soft tissue swelling and pansinusitis. B: Left frontal epidural abscess.

tenderness, and headache are the most common complaints, though seizure and focal neurologic findings have been described.² CT scanning is the imaging modality of choice. Most commonly cultured organisms include *Streptococci*, *Haemophilus influenzae*, *Bacteroides*, and less commonly, *Staphylococcus aureus*.^{2,4} Treatment includes empiric broad-spectrum antibiotics that penetrate the blood-brain barrier with early surgical drainage of the abscess and debridement of the osteomyelitic bone.⁴

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