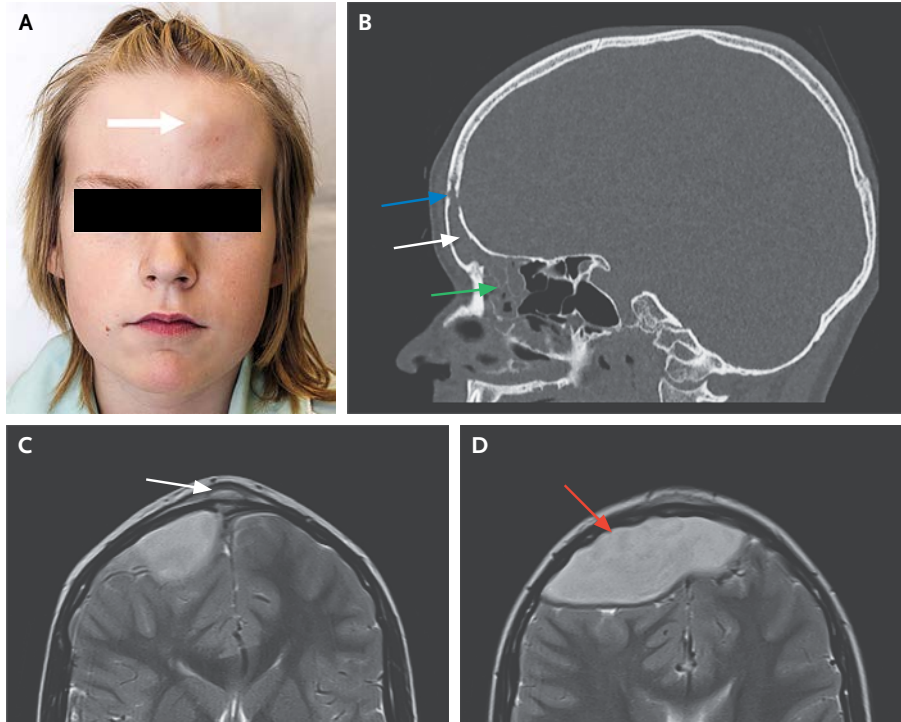


IMAGES IN CLINICAL MEDICINE

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Frontal Sinusitis Causing Epidural Abscess and Puffy Tumor



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A PREVIOUSLY HEALTHY 13-YEAR-OLD BOY PRESENTED TO THE OTORHINOLARYNGOLOGY CLINIC WITH soft, well-demarcated, painless swelling of the forehead (Panel A, arrow). He had no definite symptoms of sinusitis but had had a headache and fluctuating fever for 3 weeks. He had no neurologic deficit or abnormality on physical examination. A blood chemical profile showed a C-reactive protein level of 29 mg per liter and a white-cell count of 11,900 per cubic millimeter. Computed tomography revealed unilateral opacification of the left frontal and ethmoid sinuses (Panel B, white and green arrows, respectively) as well as defects in the frontal bone (Panel B, blue arrow). T₂-weighted axial magnetic resonance images (MRIs) showed a subperiosteal abscess in the forehead (Panel C, arrow) and a 3 cm × 5 cm × 8 cm epidural abscess (Panel D, arrow). There was no involvement of the venous sinuses. A combined neurosurgical and otolaryngologic approach was used to surgically manage the frontal sinusitis and associated epidural abscess. Cultures grew *Streptococcus intermedius*. The patient was treated with intravenous antibiotic agents for 4 weeks after surgery. He remained well, with no neurologic sequelae or residual abscess observed clinically or on follow-up MRI obtained 1 month after drainage. Pott's puffy tumor is a rare clinical entity characterized by osteomyelitis of the frontal bone and associated subperiosteal abscess, usually related to frontal sinusitis; intracranial extension is a potential complication.

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