

16-year-old with history of chronic bacterial rhinosinusitis presenting with fever and worsening headache

Sara Schulwolf, MS3

Physical Exam and Labs

ED Vitals: BP: 119/71; HR: 99; T: 97.4 F; RR: 22; SPO2: 99% RA

HEENT: Tenderness and swelling over the L forehead; TTP over the L frontal and maxillary sinuses

CRP	< 0.30
SARS-CoV-2 PCR	Positive

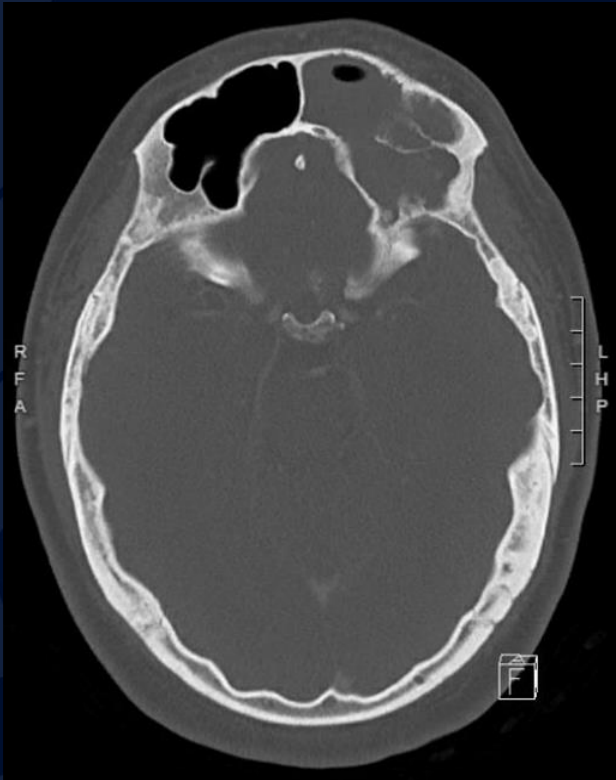
CT Scout



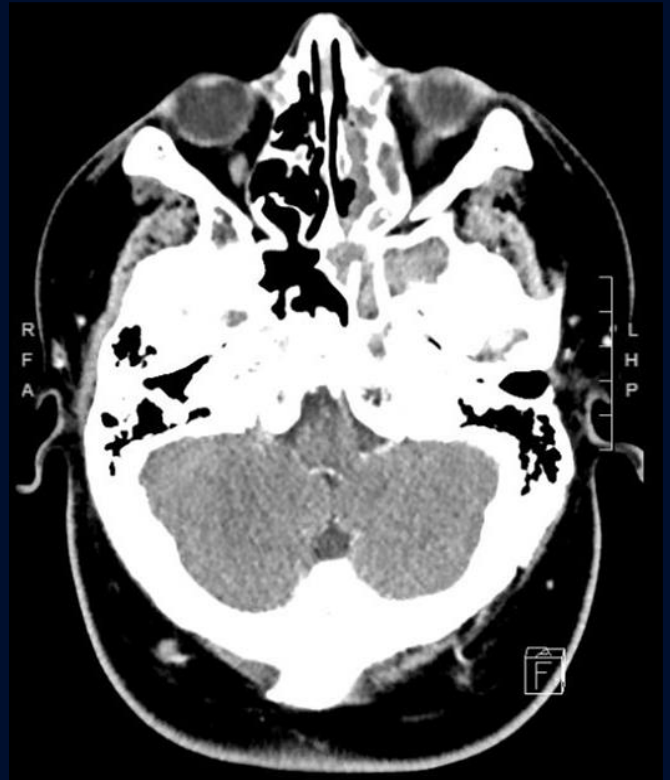
Contrast CT



Non-contrast CT



Contrast CT

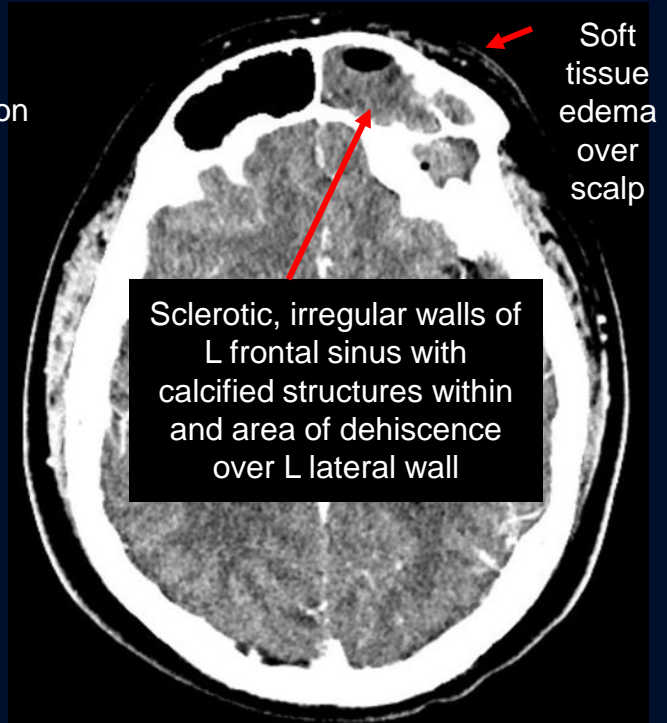
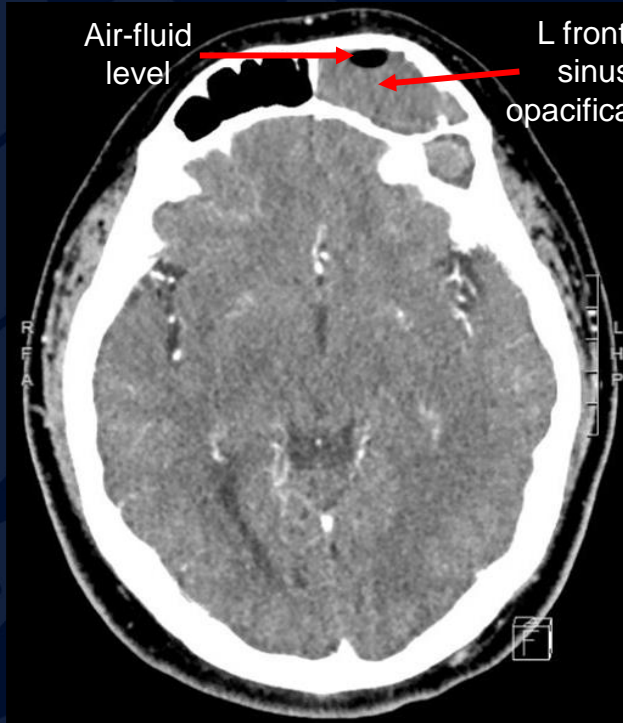


A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide.

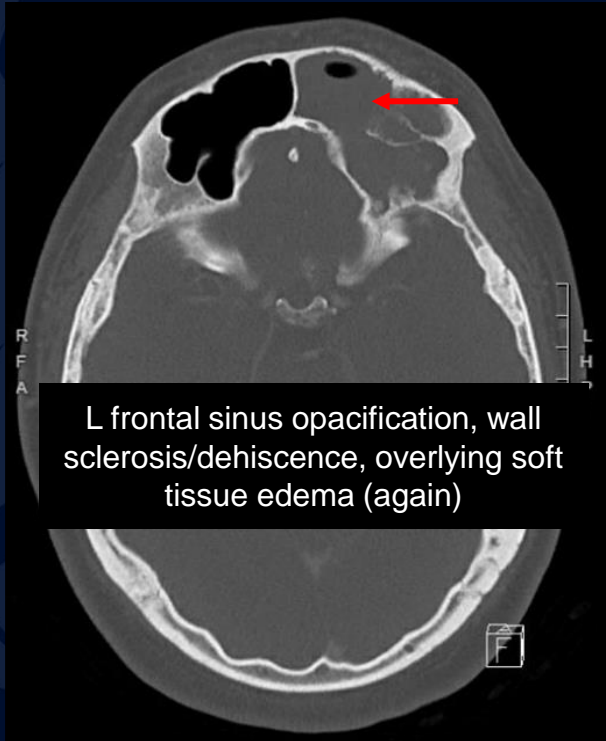
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Pott Puffy Tumor

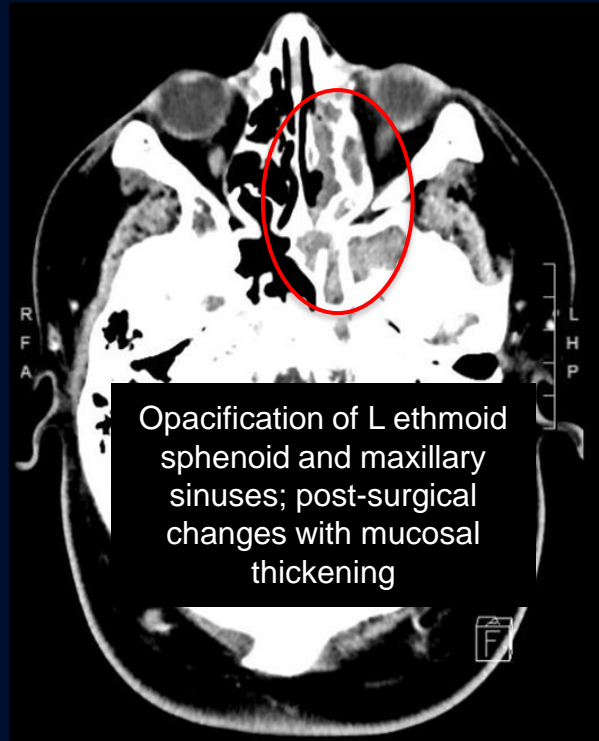
Contrast CT



Non-contrast CT



Contrast CT



CT Scout



Radiolucency (erosion) of the left frontal bone
with frontal bossing

Pott Puffy Tumor (PPT)

- PPT is formally known as chronic osteomyelitis of the frontal bone with subperiosteal abscess
 - Rare complication of chronic, untreated bacterial rhinosinusitis; less commonly, it can also occur from direct trauma to the frontal bone
- **Clinical presentation:** headache, fever, nasal drainage (can be purulent), swelling and tenderness over the frontal sinuses, photophobia, or vision changes; however, presenting symptoms vary and may be subtle
- **Differential diagnosis:** sinus abscess/mucocele; nasal polyposis; nasal mass/neoplasm; cavernous sinus thrombosis; periorbital cellulitis; orbital cellulitis; intracranial abscess; meningitis
- Most commonly implicated causal pathogens are *Streptococcus* spp, *Staphylococcus* spp, *Klebsiella* spp, and *Haemophilus influenzae*
- **Treatment:**
 - Multifaceted, involving surgical debridement by ENT/OMFS with possible repair by plastics and long-term IV antibiotics

Imaging Findings

- Contrast CT
 - Frontal sinus opacification with overlying soft tissue stranding, bony defects in involved areas of the frontal bone
- MRI
 - Extra-axial fluid collection or cerebral enhancement

References

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