

## **CLOT OR NOT?**

#### WHEN STROKE UNVEILS A HIDDEN INTRACRANIAL INFECTION



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## Introduction:

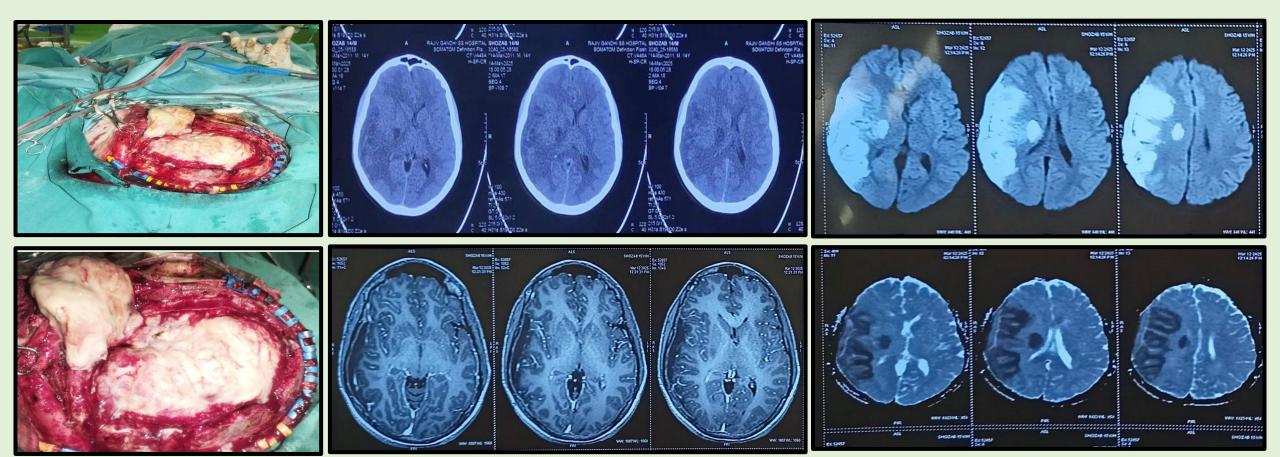
Subdural empyema is a rare but critical intracranial infection, often presenting with fever, Headache, altered mental status, or seizures. Ischemic stroke as the initial presentation is highly uncommon.

#### Aim:

This case highlights an atypical stroke like presentation of subdural empyema in a paediatric patient, emphasizing the need for early neuroimaging in acute neurological deficits.

## **Materials and Methods:**

- ☑ 14 Y/M with 15-day headache & sudden onset left-sided weakness and facial deviation
- ☑ No fever, seizures, or trauma.
- ☑ Neuro exam: Left hemiparesis with UMN facial palsy
- ☑ MRI: Right temporoparietal subdural empyema with right MCA infarction
- ☑ CSF & blood cultures: Negative
- ☑ CECT PNS: Right Maxillary Sinusitis



### Results:

- ☑ Emergency decompressive craniectomy with drain insertion performed
- ☑ Empirical IV antibiotics started, later switched to oral antibiotics for 3 months
- ☑ No causative organism identified
- ☑ Uncomplicated hospital stay with neurological improvement with physiotherapy
- ☑ Follow-up imaging: Complete resolution of empyema and infarct

# Discussion:

- This case underscores how subdural empyema can mimic acute ischemic stroke, especially in younger patients where fever and classical signs of infection may be absent.
- ☑ Potential mechanisms include mass effect, venous thrombosis, or vasospasm.
- ☑ 40-78% of cases of subdural empyema in children and young adults are associated with sinusitis and autogenic infection.

# **Conclusion:**

- Not all strokes are due to ischemia. Subdural empyema can present as an ischemic event, masking a deeper pathology.
- All patients with hemiparesis and subdural empyema should undergo a thorough workup to look for sinusitis, and autogenic infection should be investigated.
- Given the rarity of subdural empyema and the variability in reporting, a precise percentage of how many patients with subdural empyema will develop an ischemic stroke is not well established in the literature and requires further research.