

A Case of Neglected Frontal Sinusitis Led to Frontal Sinus Empyema with Ocular Complications

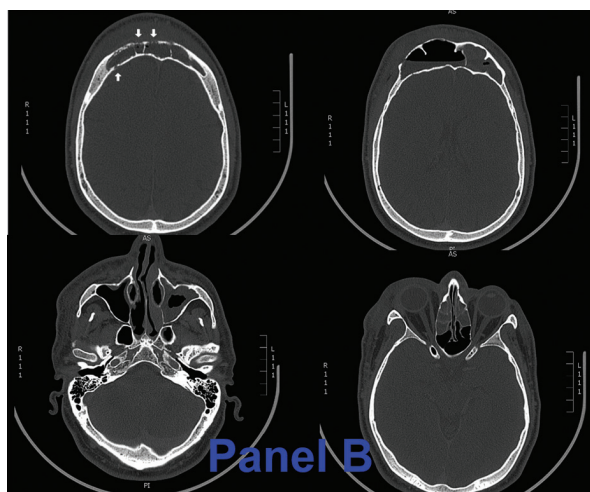
Stergios Lialiaris, Georgios Fyrmpas, Michael Katotomichelakis

Department of Otorhinolaryngology, Medical School, Democritus University of Thrace, Greece

Correspondence: stergioslialiaris@gmail.com; Tel.: + 30 698 7595200

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A 33-year-old male patient presented to the emergency department of our hospital with oedema and swelling over his forehead and upper right eyelid (Panel A). He complained of itching-eyes and a rash which had appeared 20 days earlier, and the swelling had appeared gradually over the next few days. He also reported a severe headache and the inability to open his right eye due to the swelling. The eyelid could hardly be retracted at all. Antibiotic drops prescribed by his ophthalmologist failed to resolve the symptoms. On clinical examination his vital signs were normal. Laboratory workup comprised a full blood count showing leukocytosis with neutrophilia, without any comorbidities.

Only *S. aureus* was isolated. The C-reactive protein was 7.7 mg/dl. Ophthalmological examination revealed decreased ocular mobility of the right eye due to swelling, but vision was unaffected. The top left image from a computed tomography scan (Panel B) shows orbital cellulitis and frontal sinus empyema with osteolysis of the posterior wall, which raised the suspicion of an intracranial complication. At first, he was treated with intravenous antibiotics for 24 hours. Since his condition worsened with dizziness and swelling, he was taken to the operating theatre. Under general anesthesia, he underwent functional endoscopic sinus surgery, including a Draft 2b procedure on the right side. He was discharged on the 4th post-op day on intranasal steroids, with intranasal washes with normal saline and oral antibiotics. Complete resolution was noted after two months (Panel C).

Acute rhinosinusitis (ARS) can lead to a variety of complications if it is left untreated or

misdiagnosed. It has been reported that almost all infections of the frontal and maxillary sinuses are rhinogenic (1). Doctors should be aware of the serious potential complications of ARS, which range from orbital to frontal lobe abscesses. Management consists of a combination of systemic antibiotics and surgical drainage, with excellent outcome (2).

Conflict of Interest: The authors declare that they have no conflict of interest.

References

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