25. **A RARE COMPLICATION OF CHRONIC OTITIS MEDIA: SEPTIC THROMBOSIS OF THE TRANSVERSE SINUS AND MENINGOENCEPHALITIS DUE TO A PARAMENINGEAL INFECTION. A CASE REPORT**

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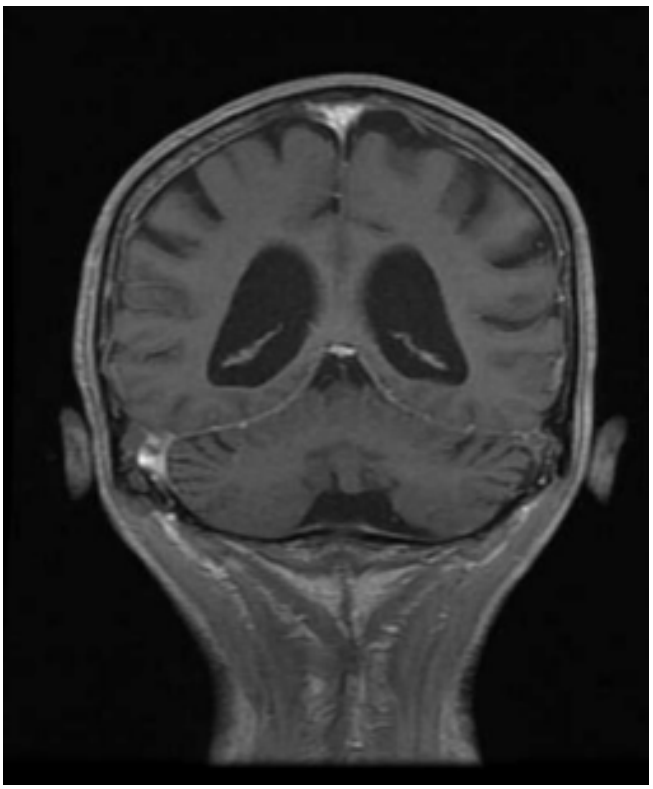
https://www.youtube.com/watch?v=vlsNiqV1-28&t=21105s

BACKGROUND: Septic cerebral venous sinus thrombosis or septic cavernous thrombosis is an extremely rare disorder, with 2 to 13 cases per million per year, following the introduction of antibiotics and advances in diagnostic imaging. It is a complex pathology, difficult to diagnose and life threatening. It has a high risk of otoneurologic sequelae, and it requires follow-up by various specialties, as treatment is medical and surgical, including neurology, internal medicine, intensive care, otorhinolaryngology, and infectiology, among others. Due to the low occurrence of septic cavernous thrombosis, the diagnosis may be erroneous or delayed, increasing complications and mortality. It is essential to perform a complete physical examination with emphasis on the ophthalmological, otological, rhinosinusal and neurological examinations, which is why this case is described. **THE CASE**: We describe a 77-year-old male patient, with history of high blood pressure, nasopharyngeal carcinoma in remission, bilateral hearing loss, prostatic hyperplasia, otitis media, and chronic mastoiditis. He was admitted due sudden onset of difficulty standing, gait instability, mutism, unquantified fever spikes, headache, and vertigo. The initial laboratory tests only revealed a complete blood count with leukocytosis. A simple brain computed tomography (CT) scan did not show relevant findings; therefore, a lumbar puncture (LP) was carried out due to suspicion of bacterial meningoencephalitis. Analysis of cerebrospinal fluid (CSF) showed pleocytosis with a predominance of polymorphonuclear cells, hypoglycorrhachia and hyperproteinorrachia. Empirical antibiotic therapy was started with Vancomycin and Cefepime. At day five since onset of symptoms, he did not have improvements of his symptoms, so a new LP was carried out and antibiotic therapy was escalated. In the CSF it was found an increased cellularity with greater hypoglycorrhachia, persistent hyperproteinorrachia, and cellular shift to lymphocyte predominance. A contrast-enhanced magnetic resonance imaging (MRI) of the brain was requested, showing pyogenic ventriculitis and decreased flow at the left transverse sinus, suggesting possible thrombosis, which was later confirmed with a contrast-enhanced brain angio-MRI. Furthermore, due to the otological involvement, a CT scan of the ears was performed, which showed severe bilateral otomastoiditis with bilateral mastoid cholesteatomas, bilateral otitis externa, and osteomyelitis of the left petrous apex. A diagnosis of a septic thrombosis of the left transverse sinus, in the context of meningoencephalitis secondary to a parameningeal focus, was made. Treatment with Meropenem 1 gr intravenously every 8 hours and Vancomycin 1 gr every 8 hours was continued up to 28 days. During the hospitalization, otorhinolaryngology did a mastoidectomy and continued outpatient antibiotic management with Ciprofloxacin for seven more days. The patient did not require anticoagulation, and at follow-up he was notably recovered, and in control studies the recanalization of the thrombosis was confirmed. **CONCLUSION**: Septic cerebral venous sinus thrombosis is a rare pathology, but with a high associated morbidity and mortality, which requires multidisciplinary management. It is vital to know its pathophysiology and predisposing factors to include it in differential diagnoses when managing a patient with meningeal symptoms.

Figure. Contrast-Enhanced Magnetic Resonance Imaging in the Venous Phase Showing an Obstructed Left Transverse Sinus (blue arrow).



Key words: Septic thrombosis; Dural Venous Sinuses; Meningoencephalitis; Otitis Media; Mastoiditis (Source: MeSH-NLM).