

**AWARD FOR THE BEST CASE REPORT PRESENTATION AT THE WCMSR BASED ON THE JUDGES AVERAGE SCORES, 1<sup>ST</sup> PLACE:****09. HYPERCOAGULABILITY AND CAVERNOUS SINUS THROMBOSIS DUE TO PROTEIN C DEFICIENCY. A CASE REPORT.**

Wilson S. Peñafiel-Pallares<sup>1</sup>, Camila Brito-Balanzátegui<sup>1</sup>.  
<sup>1</sup> Fifth-year Medical Student. Universidad de las Américas, Quito, Ecuador.



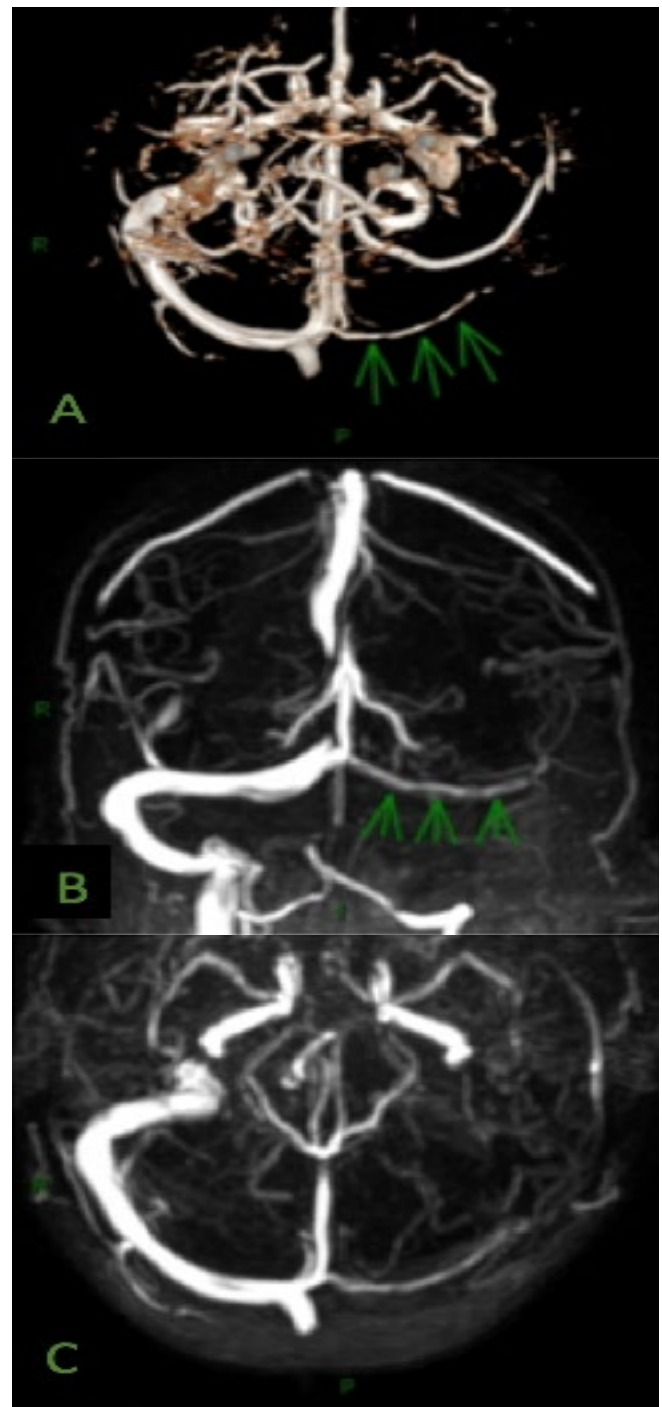
<https://www.youtube.com/watch?v=0JIMP5Fyl7s&t=21459s>

**INTRODUCTION:** Thrombophilia due to protein C deficiency is an unusual condition, present in 0.2% of general population. Cerebral venous thrombosis has an incidence of 3-4 cases per million in adults. A combination of both is very uncommon. Patients with these conditions are prone to acquiring life-threatening superinfections.

**CASE:** A 51-year-old woman presented to the Emergency Department with bilateral pressing frontal headache accompanied with nausea and vomiting. Laboratory findings, medical history and physical examination were unremarkable. Computed tomography demonstrated sphenoidal rhinosinusitis. Migraine diagnosis was established and treated with analgesics. No treatment for sphenoidal rhinosinusitis was prescribed. Over the next 2 weeks, headaches worsened, and the patient returned to the Emergency Department showing left periorbital edema, fever, diplopia, and disorientation. Laboratory exams showed low protein C levels, elevated procalcitonin and neutrophilia. Magnetic Resonance Venography revealed cavernous sinus thrombosis. The patient was treated with empiric antibiotic treatment (vancomycin, ceftriaxone, and metronidazole) and long-term direct oral anticoagulants (Dabigatran). After one year of the diagnosis, the patient fully recovered and showed no recurrence of thrombotic events.

**CONCLUSION:** This case report emphasizes the importance of early diagnosis and appropriate management of patients with protein C deficiency complicated by septic cavernous sinus thrombosis.

**Figure.** Brain Magnetic Resonance Venography Confirming Cavernous Sinus Thrombosis.



**Legend:** **A:** 3D Reconstruction of a Magnetic resonance cerebral venography. Axial section, cranial view. **B:** Magnetic resonance cerebral venography. Coronal section. **C:** Magnetic resonance cerebral venography. Axial section, cranial view. All of them show decreased diameter, signal intensity and filling defects of the left transverse sinus and ipsilateral internal jugular vein (green arrows). Tortuosity and dilatation of the left ophthalmic veins are also present.

**Key words:** Thrombophilia; Protein C deficiency; Cavernous sinus thrombosis; Case report.