

Case 1



Identification and Chief Complaint

September 3rd 2017

V.A.S., 14 years old, male, born and raised in São Paulo, Brazil

Previously healthy

Admitted at the E.R. with left visual loss and altered level of consciousness

Recurrent episodes of headaches during the past 30 days, blurred vision and poor balance.

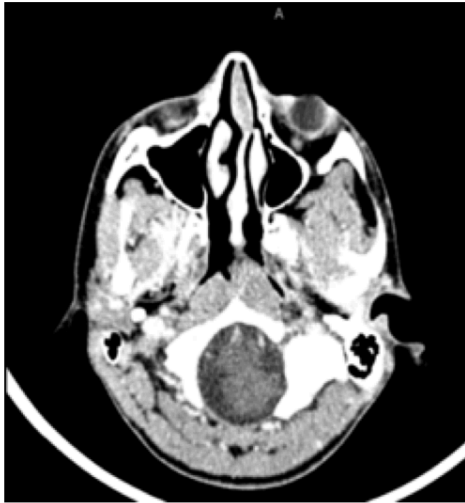
Physical Examination

Non alert

GCS = 7

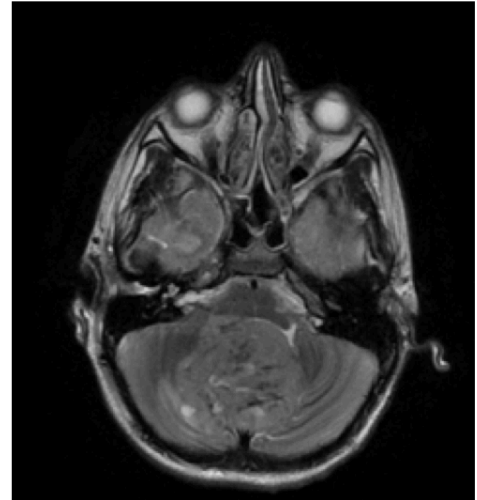
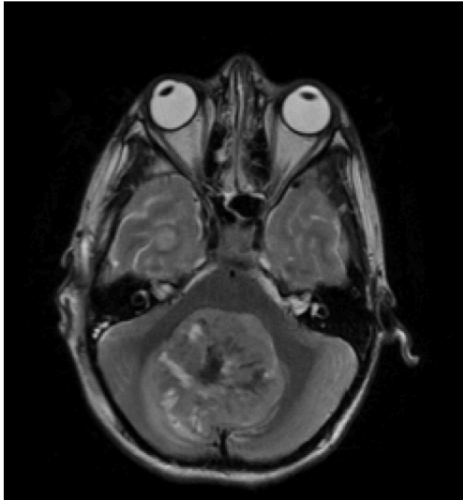
➔ Successful endotracheal intubation performed and a CT was ordered

CT scan – Sep 3rd



Posterior fossa tumor that compresses the brainstem \Rightarrow Ventriculoperitoneal shunt

MRI scan – Sep 4th



Imaging Differential Diagnosis and Treatment

Infratentorial mass, with partially defined limits, occupying the fourth ventricle and measuring 6.1 x 5.6 x 5.5 cm.

- Consider Embryonic Tumors (e.g., medulloblastoma, atypical rhabdoid teratoid tumor)

➔ Resection of the mass

- Pathology Report: Classic Medulloblastoma (WHO Grade IV) - Beta catenin +

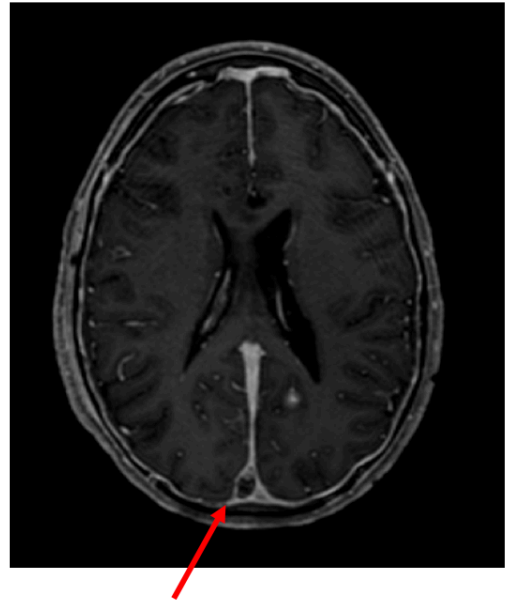
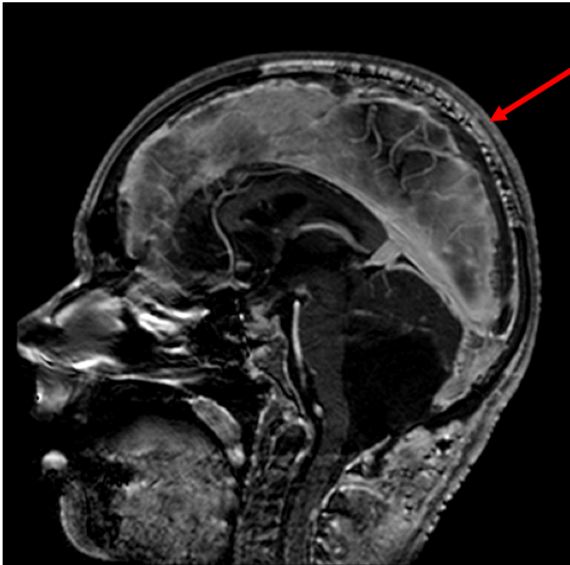
Day 1 postoperative CT



Clinical progress

- Good progress, extubated
- Maintained blurred vision
- ICU discharge on Sep 12th

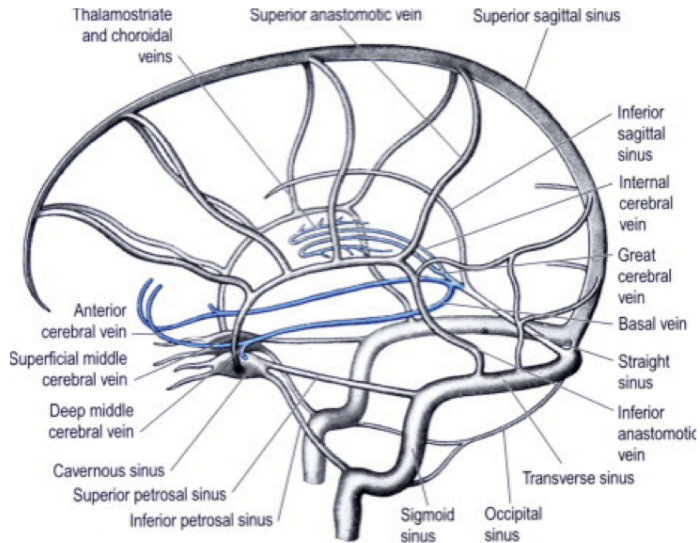
Magnetic Resonance Angiography (MRA) - Sep 14th



Filling defect within the superior sagittal sinus



Sinus Venosus

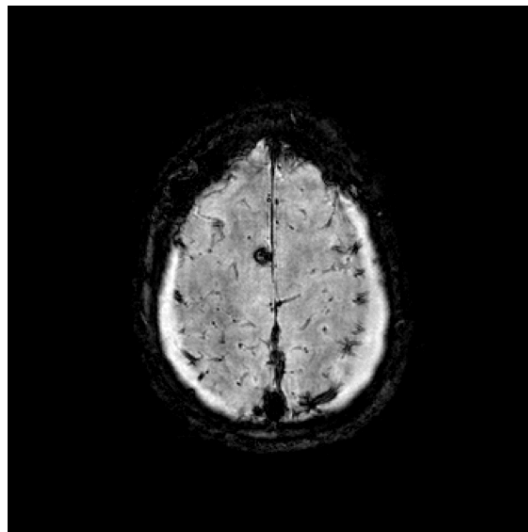
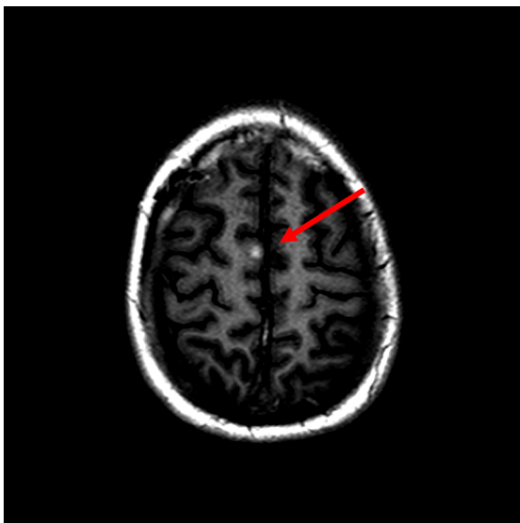


Greenlee J, Handbook of Clinical Neurology 2010



Intraparenchymal Bleeding

- Right superior frontal gyrus



Questions

- Would you treat this patient?
- If yes, what anticoagulant therapy would you choose and how would you monitor it?
- How long would the treatment last?

Treatment

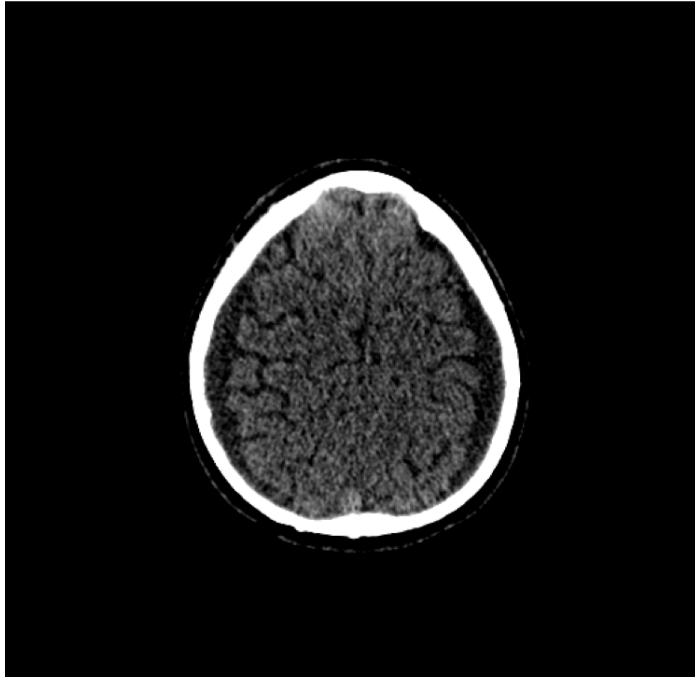
Anticoagulation using Low Molecular Weight Heparin (LMWH):

- Enoxaparin 1mg/kg/dose q12h

Labs:

- Hb=10.8 / Hct=31.2 / WBC=11360 / Plt=264k
- Fibrinogen= 313
- aPTT= 23.1s / R=0.8
- PT=13s / Prothrombin activity= 88%
- D-Dimer=5238

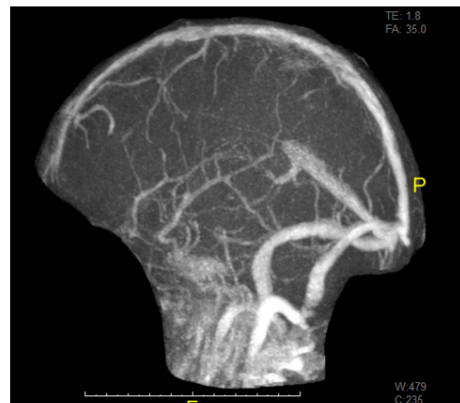
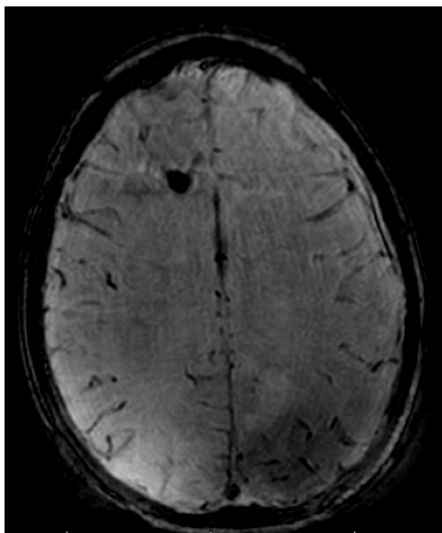
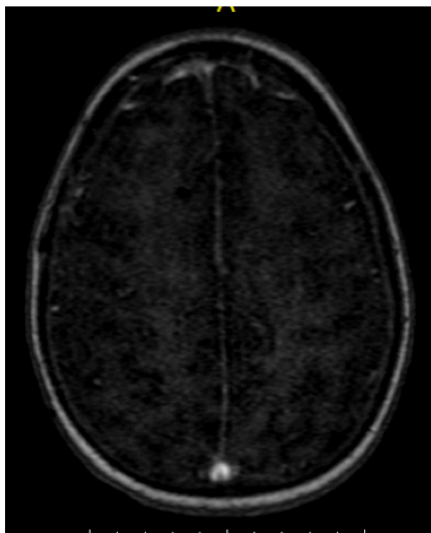
CT Scan 4 days after beginning anticoagulation



No bleeding signs

MRA 3 months later

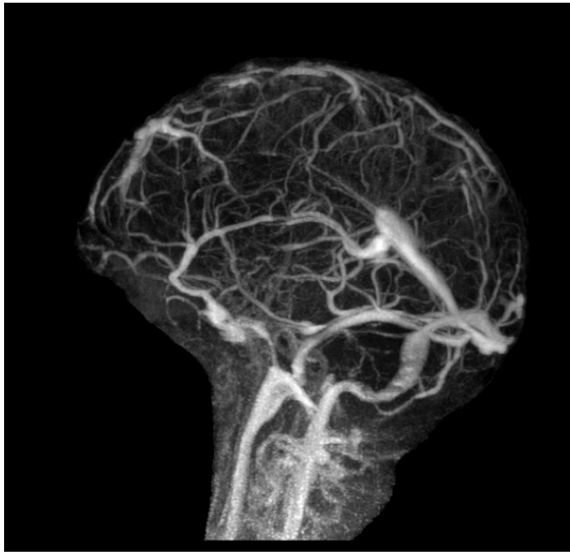
- Recanalization of the superior sagittal sinus



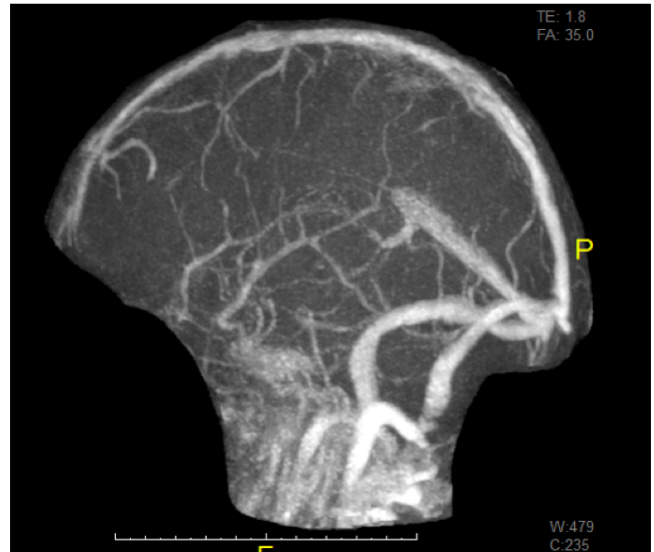
End of anticoagulation treatment –
Patient continued chemotherapy sessions + radiation therapy + prophylactic Enoxaparin

MRA after 3 months

- Recanalization of the superior sagittal sinus



Before



After

Clinical progress

Partial vision loss

Grade 4 muscle weakness

No complaints or bleeding