

# Mechanical thrombectomy using direct thromboaspiration for the treatment of cerebral venous sinus thrombosis

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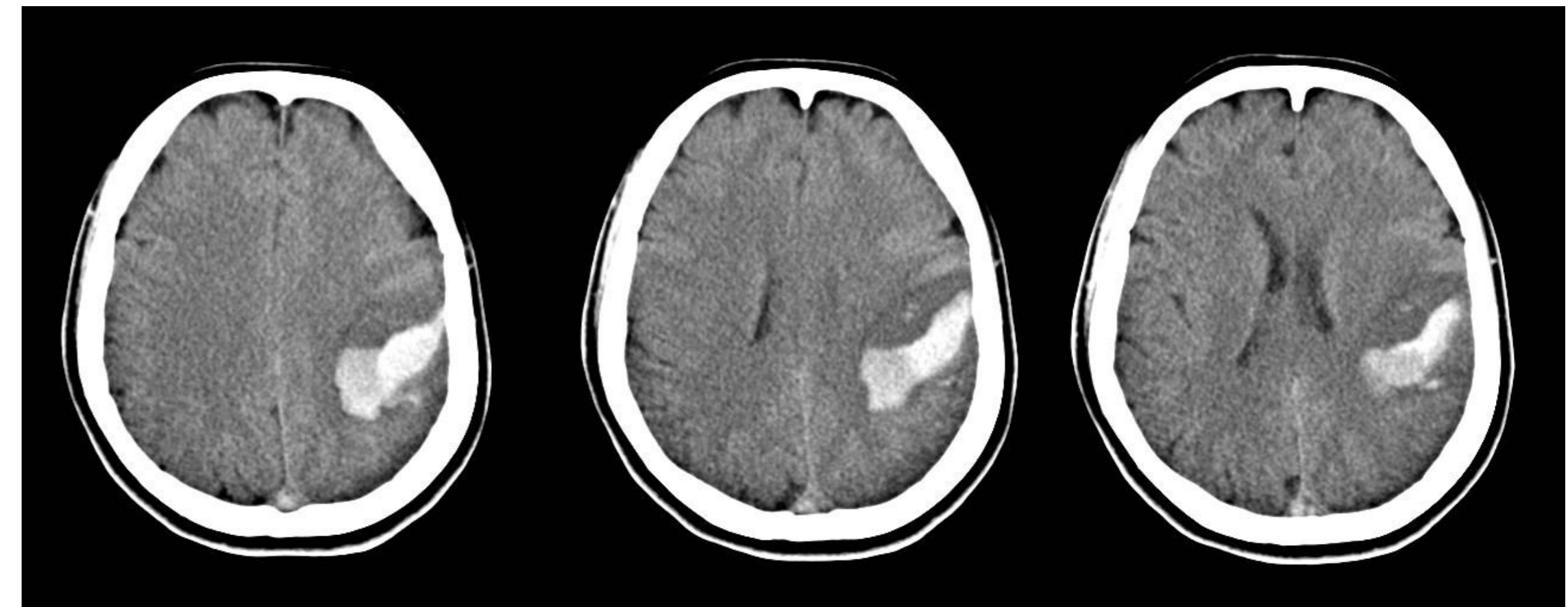
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Cerebral venous sinus thrombosis (CVST) is an uncommon but potentially life-threatening condition. Endovascular treatment of CVST is currently accepted as a rescue treatment for patients who have neurological deterioration despite anticoagulant therapy. Endovascular approach includes both pharmacological and mechanical thrombolysis

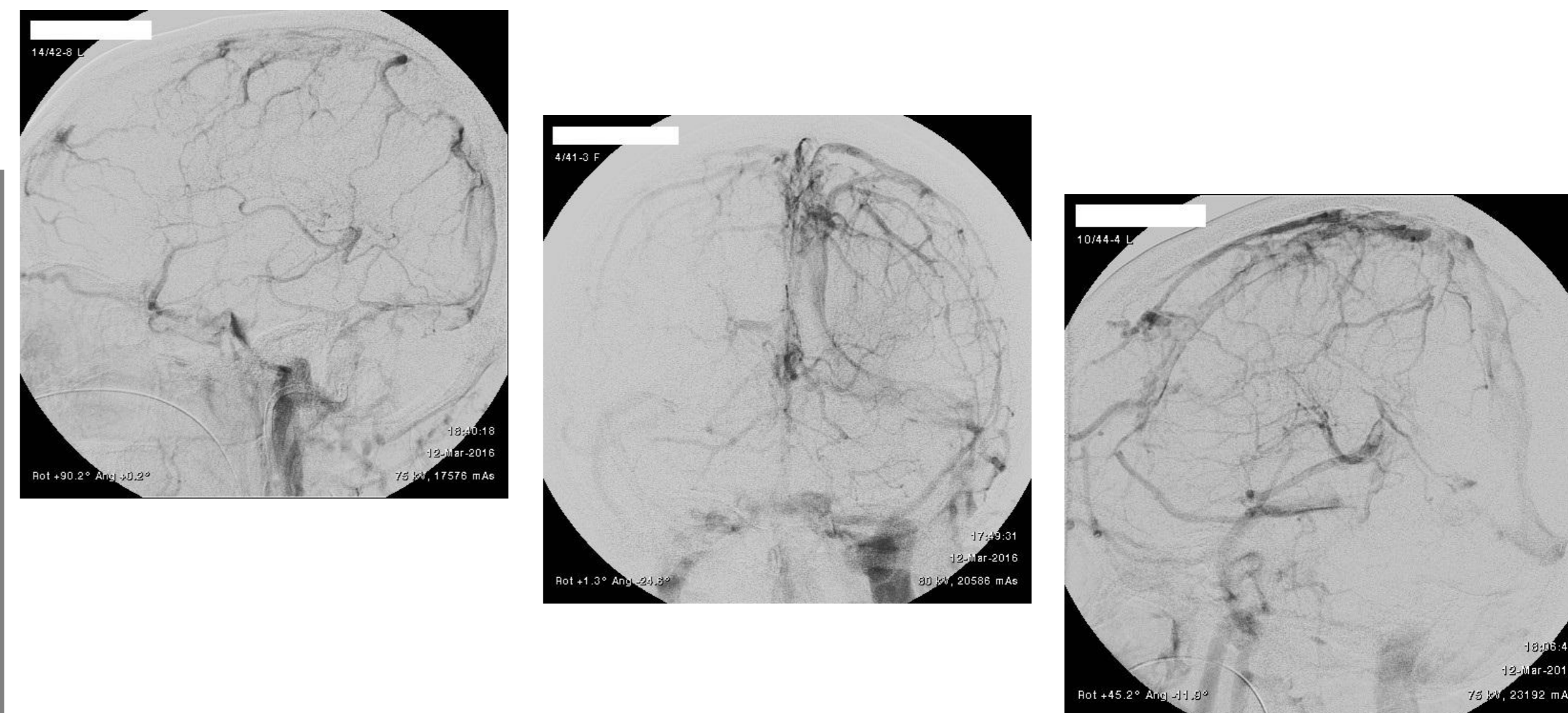
We present the case of a 37-year-old woman with extensive superior sagittal sinus, straight sinus and left transverse sinus thrombosis. She was admitted at an outlying hospital with 7 days history of headache and vomiting. Although anticoagulation therapy was promptly undertaken, she was worsening. She developed a right side hemiparesis with aphasia, she also presented seizures and a progressive decrease in consciousness. The patient was finally transferred to our hospital for endovascular treatment

A successful fully venous recanalization was achieved using direct aspiration via Penumbra catheter under general anesthesia. The patient rapidly improved during the following days and was send to rehabilitation with mild aphasia and moderate paresis (mRS=2).

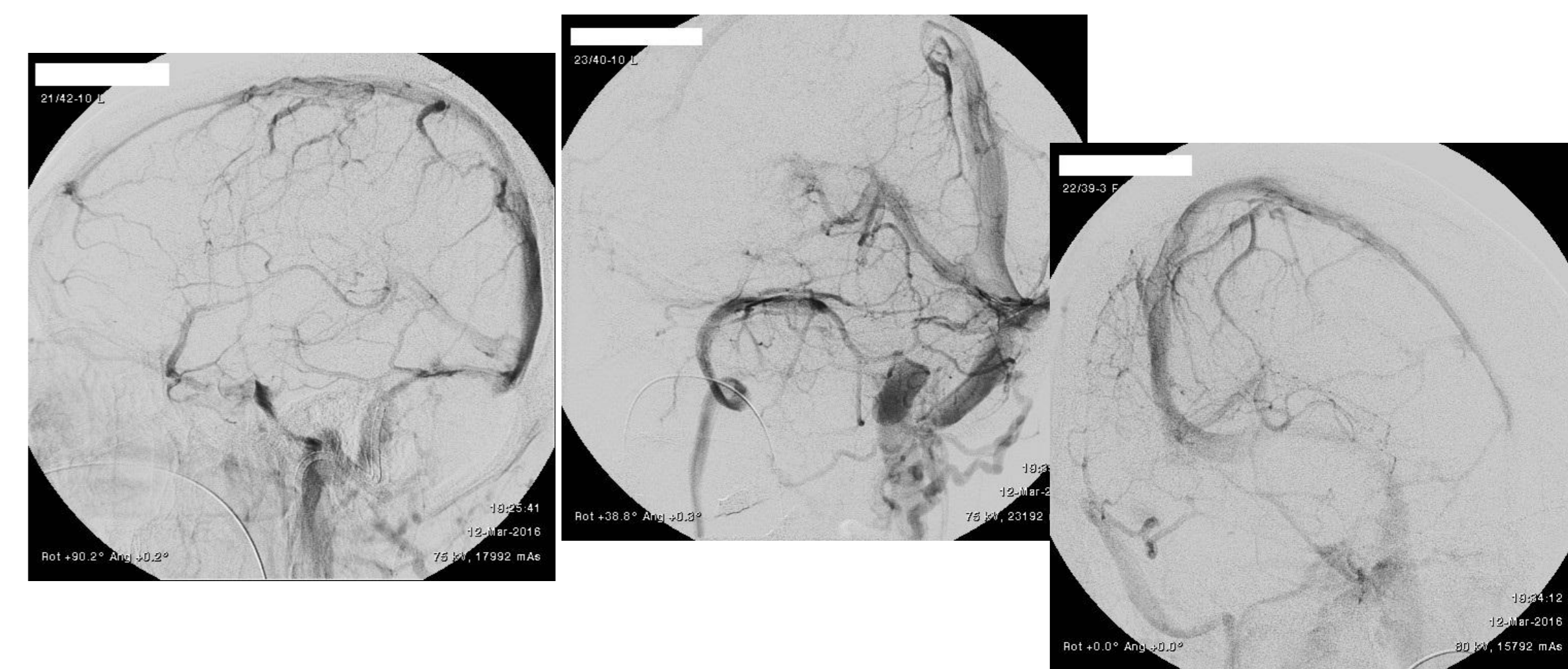
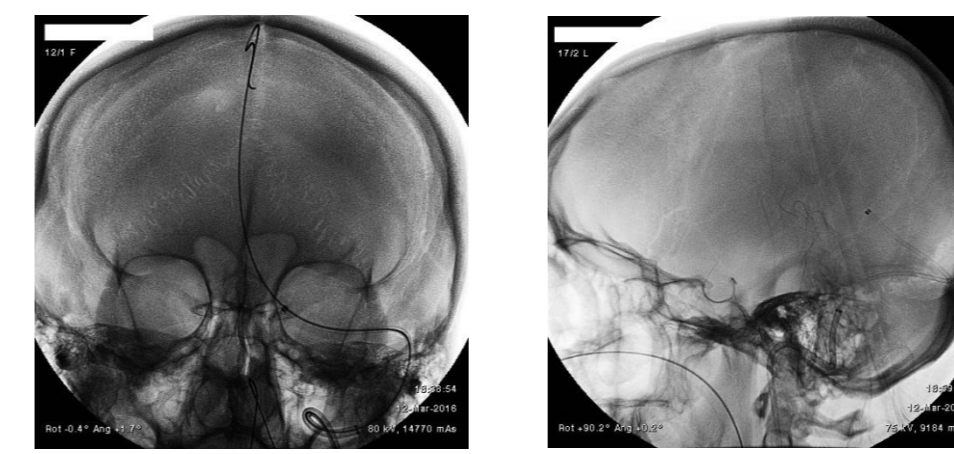
Mechanical thrombectomy with direct aspiration using the Penumbra device can be considered an helpful and safe therapeutic strategy for management of CVST.



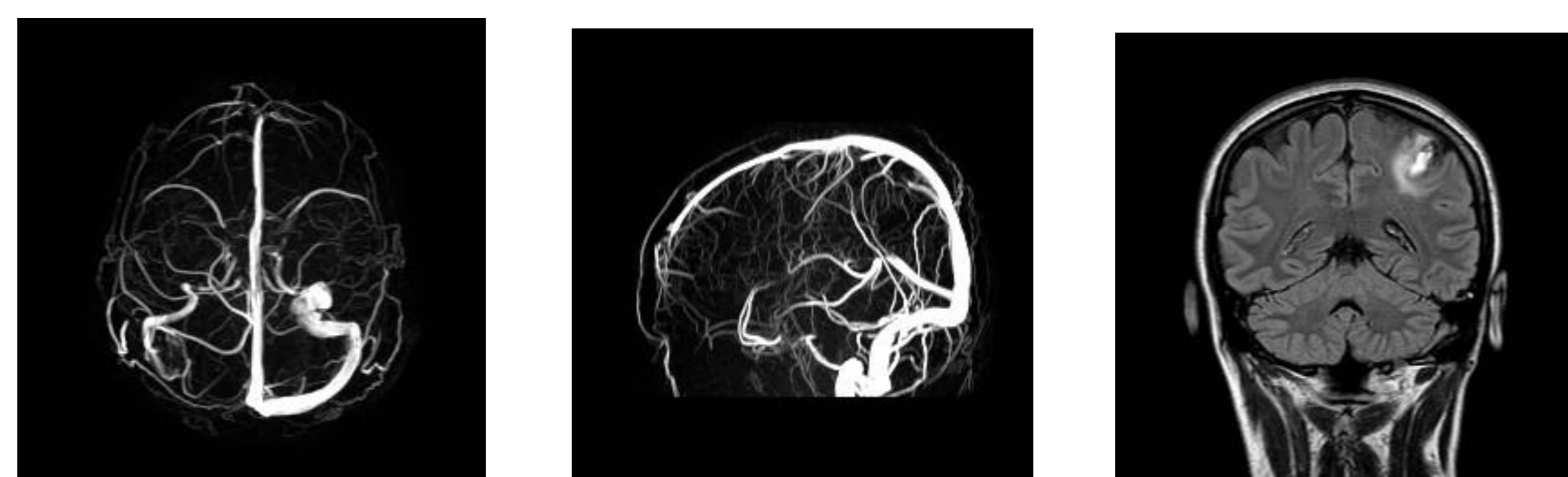
Axial CT scan of the brain at the admission



Digital subtraction venography before endovascular treatment  
Thrombosis of superior sagittal, straight, left transverse sinuses  
Partial thrombosis of left sigmoid and right transverse sinuses (hypoplastic)



Digital subtraction venography after endovascular treatment  
The final angiographic controls demonstrate the complete recanalization of the thrombosed venous sinuses, with an overall improvement of the cerebral venous drainage



MRI three months after discharge