A Stroke in 20-years-old pregnant secondary to extensive cerebral venous thrombosis

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Abstract

We present a case of 20-years-old pregnant who presented with left sided weakness in her 3rd trimester. Imaging confirm an extensive venous thrombosis and started treatment with anticoagulation. We discuss this rare cause of stroke which represents around 0.5% of all stroke.

Case Presentation

A 20-years-old presented with a 5-day history of headache and drowsiness. She developed left arm weakness 3 days after the start of the headache. She had no past medical history. No personal or family history of stroke.

On examination, GCS 13/15, she had left hemianopia and left facial droop. She had dense left arm weakness, left sided sensory inattention and extensor plantar response on the left. Her COVID test negative, ANA screen, ANCA was normal

MRI and MRV (As shown in images) demonstrated extensive venous sinus thrombosis with resultant large infarction of the posterior parietal and occipital lobe with haemorrhagic transformation as well as further small venous infarcts in the right posterior frontal lobe with mild mass effect.

Treatment started with Low molecular weight Heparin. A few hours later, she had a generalised Tonic Clonic seizure and then started levetiracetam

Discussion and conclusion

Cerebral venous thrombosis is a rare and potentially fatal type of stroke, if not treated early. In addition to hereditary and acquired causes of hyper-coagulability, pregnancy is still a common culprit for development of Cerebral venous thrombosis. With stable neurology status, treatment with anticoagulation with symptomatic treatment is indicated. While with declining neurology status, options of endovascular or surgical intervention should be discussed with Neurosurgery and interventional radiology.