

A Rare Case of Dissection of the Cervical Portion of Internal Carotid Artery, Diagnosed Postpartum



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Objective

- Post partum dissection of Internal Carotid Artery is relatively uncommon but is an important cause of stroke in young women
- Symptoms often mimic normal postpartum. symptoms and can be difficult to diagnose
- Early detection and management can lead to improved prognosis

Conclusion

Early identification of symptoms can prompt early diagnosis and treatment which can improve prognosis greatly. Clinicians should be aware of the pathology as it mimics common postpartum symptoms

References

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Case History

History

- 36 year old Caucasian in her first pregnancy was admitted with spontaneous labour
- No significant past medical history

Symptoms

- Persistent tachycardia and headache in labour and postpartum
- Cardiac evaluation was suggestive of sepsis induced ischaemia
- Horner's syndrome and itching around periorbital region on day four postnatally

Investigations

- CT Angiography: Distal right internal carotid artery dissection with pseudoaneurysm. Confirmed by an MRI and MRA of head and neck

Management

- Conservative management with Aspirin and LMWH
- Discharged home on Day 8

Follow up

- 6 weeks: Significant improvement in her symptoms with occasional, short lasting unequal pupils with spontaneous resolution. Tingling in right first and second toe
- She was counselled about her recurrence risk being less than 2 percent in subsequent pregnancies and that there is no consensus on the safest mode of delivery
- Advised to avoid oestrogen containing contraceptive due to its deleterious effect on thrombotic risks
- Six months follow up MRI and neurology review showed complete resolution

Discussion

- Postpartum dissection of the internal carotid artery is a relatively rare condition. Underlying aetiology in 5% to 25% of strokes in young individuals. Exact pathogenesis is unknown
- Most common presenting symptoms (about 60-90%) are ipsilateral head and face pain with or without neck pain. Common neurological findings include ipsilateral Horner's syndrome (25%), retroorbital pain, tinnitus, cranial nerve palsy and nerve root involvement.
- Demand urgent investigations and management. Although rare, can result in severe and permanent neurologic sequelae if not identified and treated promptly.
- Though catheter angiography is the gold standard, non-invasive methods like MRI/MRA are preferred.
- The mainstay of therapy is antiplatelet and/or anticoagulation therapy. Endovascular stenting is reserved for severe cases. Long term prognosis is favourable if diagnosis and treatment are prompt. Women should however be counselled about the recurrence risk and stroke in future pregnancy.