Introduction

- Wallenberg Syndrome (WS)
- Lateral medullary ischemia → typically involves vertebral or posterior inferior cerebellar artery occlusion.
- Clinical features: vertigo, dysphagia, ataxia, autonomic instability.
- Vertebral Artery Dissection (VAD)
- Rare cause of WS.
- Neck trauma, even minor—like chiropractic manipulation, sudden head turning, sports injury)
- congenital malformation (rare)
- Presents with sudden onset headache, vertigo, possible neurological deficits.
- Pregnancy Considerations
 - Hypercoagulable state + increased hemodynamic demands.
 - Literature on neuraxial anesthesia in WS/VAD is limited but suggests it can be safe with proper planning.

WALLENBERG SYNDROME

"LATERAL MEDULLARY SYNDROME" OR "POSTERIOR INFERIOR CEREBELLAR ARTERY (PICA) SYNDROME"



27-year-old G1P0 woman

- Sudden onset headache, vertigo, nausea, gait instability 2 years ago → diagnosed with left VAD leading to lateral medullary and inferior cerebellum infarction (Wallenberg). MRI showed punctate acute infarcts within left lateral medulla and left cerebellum. MRA confirmed L vertebral artery dissection. Asked to stop OCP associated with stroke risk, as per neuro.
- No preceding trauma; possibly linked to estrogen-based contraceptives-OCPs may exacerbate thrombosis at the site of dissection. Hypercoagulable workup was negative.
- Recanalization observed, with residual vertebral artery hypoplasia.

Current Pregnancy

- She was treated initially with aspirin and clopidogrel, transitioning to aspirin monotherapy during pregnancy for preeclampsia prophylaxis On low-dose aspirin for preeclampsia prophylaxis and to reduce stroke risk.
- Neurological status stable; cleared by neurology for vaginal delivery.
- Scheduled induction at 39+5 weeks- early epidural placed- uneventful delivery.

Anesthetic Implications

- Risk of hemodynamic instability during labor.
- Concern for recurrent dissection or ischemia with uncontrolled BP surges.



Teaching points

Prevention of Hemodynamic Instability

- Early epidural analgesia → reduces pain-induced BP surges to reduce cerebrovascular risk. Pain-induced sympathetic surges during labor can increase blood pressure, heightening the risk of recurrent ischemia or re-dissection.
- Gradual dosing to avoid sudden drops in BP.

Safety of Neuraxial Anesthesia

- Literature is limited but favorable. Existing studies support its safety in cerebrovascular conditions. Early epidural analgesia and vigilant monitoring minimize the risk of adverse events. Effective pain control prevents sympathetic surges during labor that can increase blood pressure, heightening the risk of recurrent ischemia or re-dissection.
- Close neurologic and cardiovascular monitoring required.

Multidisciplinary Collaboration

- Anesthesiology, neurology, obstetrics, and possibly vascular surgery input.
- Frequent team communication to quickly address changes.

Future Considerations

- Postpartum follow-up for cerebrovascular status.
- Data needed on best protocols for neuraxial vs. general anesthesia in VAD/WS.