

A Rare case report of vertebral artery dissection in pregnancy

➤ **Objective:** Cervical artery dissection, including vertebral artery dissection and carotid artery dissection, are rare complications of pregnancy. Vertebral artery dissection is a rare cause of stroke, with an estimated annual incidence of 1 per 100,000 individuals. Vertebral artery dissection is a rare but potential cause of neurologic impairments in pregnancy and during the postpartum period. It should be considered in the differential diagnosis for women who present with headache and/or vertigo.

This case details the course of pregnancy with vertebral artery dissection and emphasizes the importance of prompt treatment and outcome.

➤ **Case report :** A 31 years old Indian patient Gravida 5 para 1 with history of 3 first trimester miscarriages at 19 weeks of gestation presented to emergency department with history of new onset headache, vertigo, nausea, dizziness, double vision and vomiting especially after the headache followed by right side numbness and weakness. Physical examination revealed cerebellar signs -no dysarthria, nystagmus+, abnormal coordination + finger nose signs and knee heel on right side. Power 5/5 in right side, 5/5 in left side. Pronator drift positive on right side, sensory decrease on right side. MRI/MRA head showed: right lateral medullary syndrome + right vertebral artery dissection and thrombosis. Patient was out of window for thrombolysis and as she is pregnant, therefore same not offered. She was started on Aspirin, observed and monitored. Patient was seen by Physiotherapy and Rehabilitation and was accepted for active inpatient rehabilitation. Thrombophilia work up including Anti phospholipid antibodies, protein c and s, factor v were negative. Autoimmune work up done was within normal limits. She was under care of multi-disciplinary team including obstetrician, neurology and physical medicine and rehabilitation. Obstetric ultrasounds done at 26 and 32 weeks were normal. Multi-disciplinary meeting was done in order to decide regarding the mode of delivery. In view of limited literature of cases of vertebral dissection in pregnancy, decision was taken for elective cesarean section. She delivered live male baby at 37 weeks of gestation by elective cesarean section.

➤ **Discussion and conclusion:** Obstetric professionals should carefully consider VAD as a differential diagnosis when evaluating women with dizziness, headache, and neck pain with or without a recent history of spinal manipulation, both in pregnancy and in the postpartum period. Moreover, they should consider with caution the risks and benefits of any cervical osteopathy practice in pregnant women with risk factors for vertebral artery dissection (hypertension and autoimmune diseases, history of tensive headache/migraine).