SUBACUTE STROKE IN YOUNG HISPANIC MALE WITH VERTEBROBASILAR DOLICHOECTASIA

Background
Vertebrobasilar dolichoectasia (VBD) is a rare clinical entity characterized by dilatation, elongation, and tortuosity of the vertebrobasilar arteries. Patients with VBD can present varying symptoms from ischemia, compression of blood vessels, or rarely subarachnoid hemorrhage.

Case presentation
A 29-year-old Hispanic man with a history of hypertension presented to the emergency department with progressive left upper extremity weakness, dizziness, slurry speech, and diplopia of one-week duration. On arrival, the patient was afebrile, heart rate 75 bpm and blood pressure 193/107 mmHg. He was alert and oriented x3. Neurological exam demonstrated decreased strength (4/5) on left upper extremity and left arm pronator drift. In addition, the right eye had partial ptosis and appeared laterally deviated with weak adduction and elevation, consistent with right cranial nerve III palsy. The patient was admitted for further workup ischemic brainstem stroke in a young adult. CT Brain was negative for hemorrhage but revealed vertebrobasilar dolichoectasia. MRI confirmed an area of ischemic stroke in the right medial midbrain at the level of cerebral peduncles involving the oculomotor nucleus. He was conservatively managed for stroke and was discharged on antiplatelet and statin therapy. He is scheduled to follow up with interventional neurology for definitive treatment.

Conclusion:
Vertebrobasilar dolichoectasia is a rare condition with a prevalence of less than 2% of the population. There is an association with male sex, older age, and hypertension. VBD can predispose to either ischemic or hemorrhagic stroke, thus making the clinical decision on management difficult. Currently, there are no guidelines on effective and specific treatments for VBD, which causes life-threatening complications. However, surgical and endovascular approaches are presently being performed. With the mean age of diagnosis in the 50s, our patient is the first case of VBD in young Hispanic to our knowledge.