

Case Presentation

Acute Care Course

- 33-year-old African American female with no significant PMH on hormonal contraception presented to a community hospital after being found down, altered, and surrounded by urine and vomit.
- Family medical history: brother with massive myocardial infarction at age 33.
- CT angiography showed acute occlusion of the left MCA with diffuse edema and a small intimal flap of the proximal left ICA, indicative of carotid web.
- She underwent decompressive hemicraniectomy and left anterior lobectomy but no endarterectomy or stenting.
- Two weeks later, she was discharged to acute inpatient rehabilitation with functional deficits including aphasia, dysphagia, and hemiplegia.

Rehabilitation Course

- She completed a 5-week course of acute inpatient rehabilitation.
- On admission, her main functional deficits included non-fluent aphasia, motor apraxia of speech, dysphagia, and right hemiparesis.
- She made significant improvements in all areas of self care, transfers, and locomotion, improving from maximum assist for all domains of self care on admission to modified independent for eating and oral hygiene and minimal to moderate assistance for dressing and bathing on discharge.
- She was total assistance for ambulation on admission and minimal assistance on discharge.
- She improved from no speech output on admission to producing simple, comprehensible phrases on discharge.
- Her dysphagia improved from tolerating moderately thick liquids and pureed solids on admission to thin liquids and regular solids on discharge.

Discussion

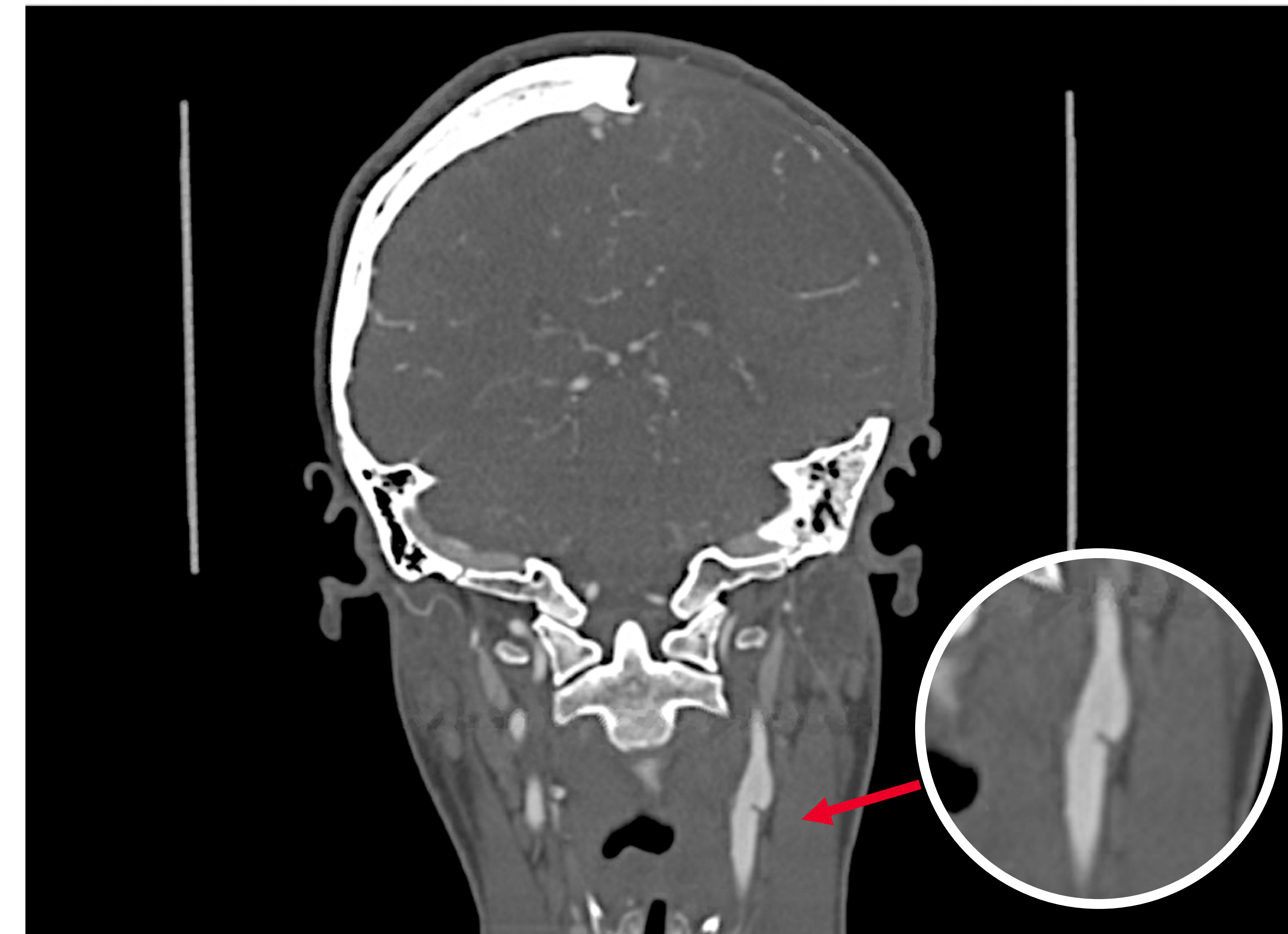
- Carotid webs are an atypical variant of fibromuscular dysplasia (FMD) that primarily affect young, African American females and may have a strong genetic component and association with hormonal therapies.
- Classic FMD is characterized by multifocal fibrosis in the tunica media, and carotid webs involve the tunica intima.
- They can extend into the carotid artery lumen, causing turbulent flow and thrombus formation, leading to ischemic infarction.
- Treatment typically includes endarterectomy or stenting; we present a case in which neither treatment was received for reasons unknown.
- This case highlights the importance of recognizing features of carotid webs, their prevalence within minority populations, and their long-term management, given the high risk of stroke recurrence.
- This case emphasizes the role of implicit bias and how race can affect a patient's diagnosis, treatment, and prioritization.

Conclusion

- Carotid webs are a rare cause of ischemic stroke in young, black, female patients.
- It is critical to recognize the features of carotid webs to aid in accurate diagnosis and treatment to prevent stroke recurrence, disability, and mortality.
- It is also important to understand the role of implicit bias in prioritizing, diagnosing, and treating minority populations.

Imaging

Image 1: CT angiogram showing carotid web in left carotid artery



References

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