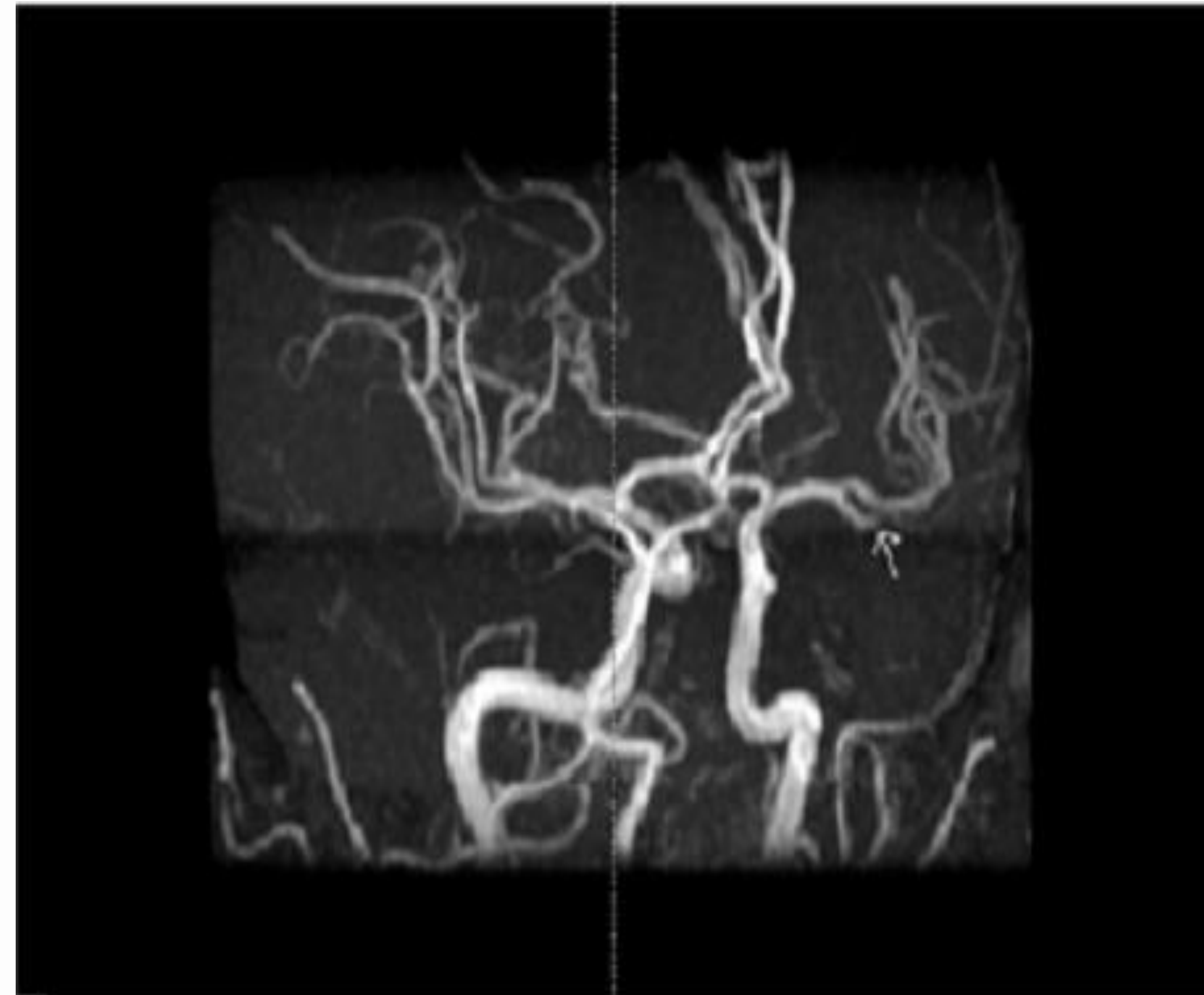


Bread and Stroke

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Introduction

- Celiac disease is an autoimmune disease that can present with intestinal and extra-intestinal manifestations.
- Neurologic manifestations of Celiac disease such as ataxia, depression and stroke are rare.
- We describe a case of Celiac disease presenting as stroke.

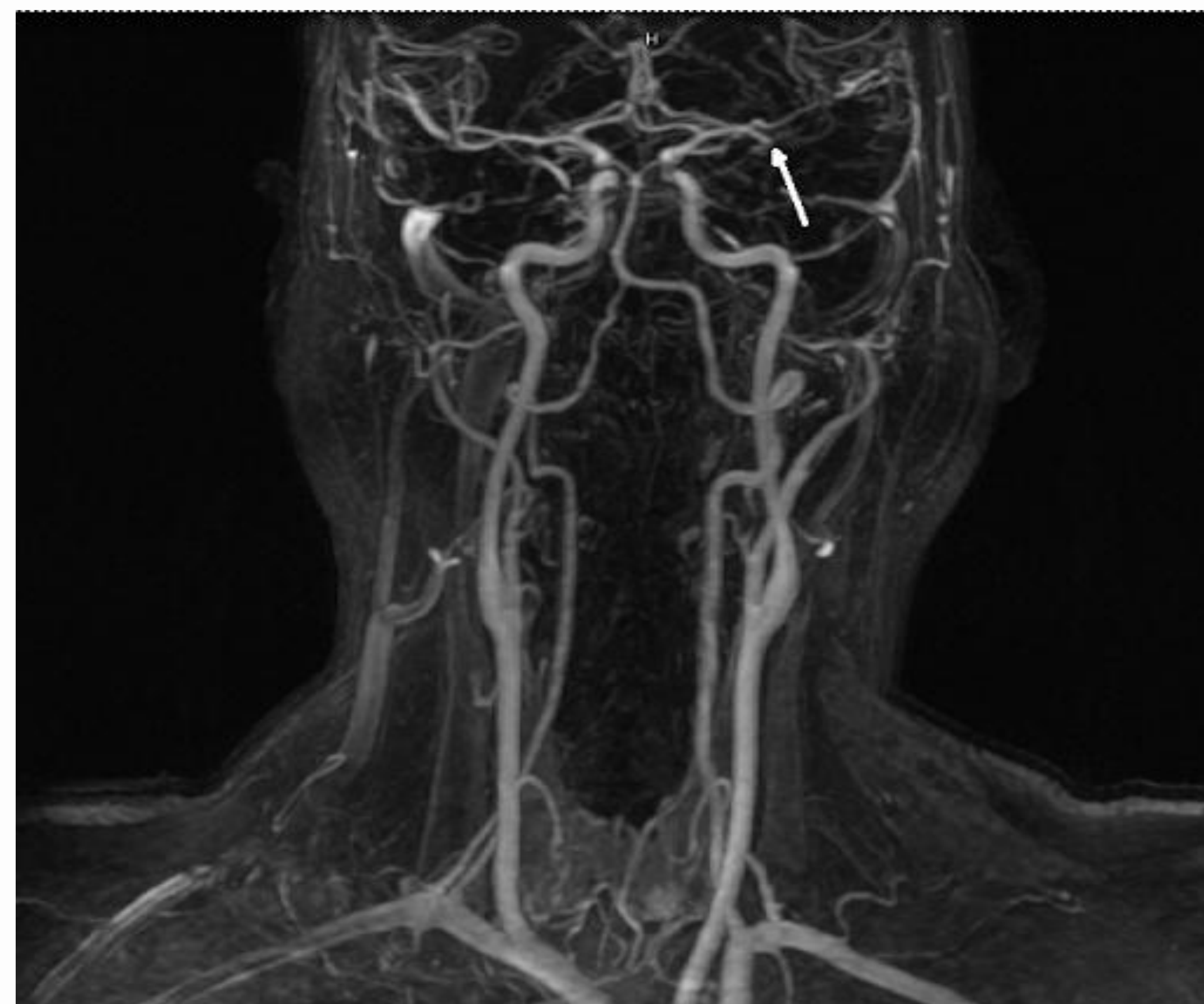


MRA showing L MCA occlusion

- Markers for celiac disease-antiendomysial and tissue transglutaminase antibodies-were positive.
- EGD with duodenal biopsy was not done in hospital.
- The patient was dismissed home on gluten free diet with suspected diagnosis of Celiac disease.

Case Presentation

- A 48-year-old Caucasian male with negative history for hypertension, diabetes mellitus, hyperlipidemia, and smoking presented for the sudden onset of confusion and aphasia.
- An MRI of the brain showed the presence of acute ischemia of the left middle cerebral artery.
- Complete hypercoagulable state workup was within range of normal except for the presence of moderately elevated homocysteine at 21.4.
- Basic laboratory testing showed the presence of iron deficiency anemia with normal level of vitamin B12 and low normal folic acid level.
- Vitamin D level was low.



MRA coronal section showing L MCA occlusion

Discussion

- Celiac disease can have neurologic manifestation such as stroke.
- Hyperhomocysteinemia is observed in 20% of newly diagnosed celiac disease.(1)
- Homocysteinemia is a risk factor for CHD and stroke.
- In patients with evidence of malabsorption and no obvious etiology for stroke, Celiac disease mediated by hyperhomocysteinemia should be considered a potential etiology.(2)

References

- (1) Casella G, Bassotti G, Di Bella C, et al. Is hyperhomocysteinemia relevant in patients with celiac disease? *World J Gastroenterol*, 2011; 217(24):2941-2944.
- (2) El Moutawakil B, Chourkani N, Sibai M, et al. Celiac disease and ischemic stroke. *Revue Neurol (Paris)* 2009; 165(11):962-966.