

Celiac Artery Compression Syndrome – A Unique presentation

Case Study- Abstract

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**Introduction:** CASC is a disorder that results from compression of the celiac artery by the median arcuate ligament, a fibrous arch that forms at the base of the diaphragm where the diaphragmatic crura join medially. The following is a unique presentation of this disease.

**Case:** 44 year old male was brought in by his family for weight loss with intermittent abdominal pain, weakness and lethargy over a period of years. Per the family, he used to be overweight 4 years ago. The patient has been living in Haiti his entire life, and recently migrated to the US 1 month ago. He has had chronic abdominal pain for 5 years associated with weight loss of 100 lbs. His family reports that has poor nutritional intake, and is only able to eat a small amount before he seems to be in pain, then refuses to eat. He has no other prior medical history except for cognitive delay, no family history of malignancy, no history of trauma, surgeries, smoking or substance use, and does not take any medications. Physical exam was largely unremarkable. Contrast enhanced abdominal angiography revealed acute angle J-configuration of the takeoff of the celiac axis, with stenosis at its origin and focal post-stenotic dilatation, suggestive of CACS.

**Discussion:**

CASC can occur in the setting of anatomic anomalies such as an abnormally cephalad origin of the celiac trunk, or abnormally caudad insertion of the diaphragm<sup>1</sup>. Physical extrinsic compression of the celiac trunk by the median arcuate ligament, as well as celiac ganglion plexus dysfunction leading to splanchnic vasoconstriction, is thought to cause intermittent mesenteric ischemia in the area of vascular distribution supplied by branches of the celiac trunk. The diagnosis is one of exclusion, as a majority of patient are asymptomatic, but can be established by a combination of imaging modalities.