A Rare Occurrence of Isolated Superior Mesenteric Artery Dissection, A Case Image Report

Nida Ansari¹, Sacide S. Ozgur², Alan Alcantara³, and Patrick Michael²

¹Saint Joseph’s Healthcare System
²St Joseph’s University Medical Center
³St Josephs Regional Medical Center

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Nida Ansari, D.O.¹, Sacide S. Ozgur, M.D.¹, Alan Alcantara, M.D.¹, Patrick Michael, M.D.¹

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Consent: As this is a case report, consent was obtained for the purpose of this paper.

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Author affiliation: Ansari, N., Ozgur, S., Alcantara, A. performed the literature review and wrote the manuscript, and all authors contributed to the writing, the final editing, and the collection of the patient’s clinical data. All work was performed at St. Joseph’s University Medical Center at the following address:

St. Joseph’s University Medical Center
Department of Internal Medicine
703 Main Street
Paterson, NJ USA 07503
973-754-2000

All authors, including the corresponding author, may be reached using the aforementioned contact information.

Key Clinical Message:

Isolated spontaneous superior mesenteric artery (SMA) dissection is relatively rare. Often found incidentally on cross-sectional imaging, often managed non-operatively. We present a patient who presented with chest pain and was found to have a SMA dissection.

Case Presentation:

A 39-year-old male with a past medical history of alcohol abuse disorder presented to the emergency department with chest pain with radiation to the left arm. EKG was obtained and showed a heart rate of 70 bpm and sinus rhythm with no ischemic changes. To evaluate further etiologies, computer tomography angiography of the chest, abdomen, and pelvis was performed, which revealed a small dissection of the proximal
superior mesenteric artery (Image A). Vascular surgery was consulted; however, no surgical intervention was performed as distal flow beyond the dissection was noted.

Image A: Axial View of Computer Tomography Angiography of the chest, abdomen, and pelvis showing proximal superior mesenteric artery.

Discussion:
Spontaneous idiopathic superior mesenteric artery dissection is rare and could be fatal by inducing bowel ischemia, infarction, and potentially death [1,2]. Patients typically present with an acute onset of abdominal pain, back pain, and flank pain however, patients can be asymptomatic [2]. More often seen in men than women, risk factors include hypertension, atherosclerosis, connective tissue disorders, vasculitis, trauma, or idiopathic [1]. The gold standard for diagnosis includes computer tomography or magnetic resonance angiography [1]. In regards to management, surgical intervention is warranted when there is concern for bowel ischemia or aneurysmal degeneration [2]. In a study by Morgan et. al.where 77 patients with spontaneous mesenteric dissection, only four required surgical intervention, and 73 were managed conservatively [2]. This was the case for our patient.

References:
