

A Case of Spontaneous Isolated Celiac Artery Dissection with Pseudoaneurysm Formation

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- Nothing to disclose

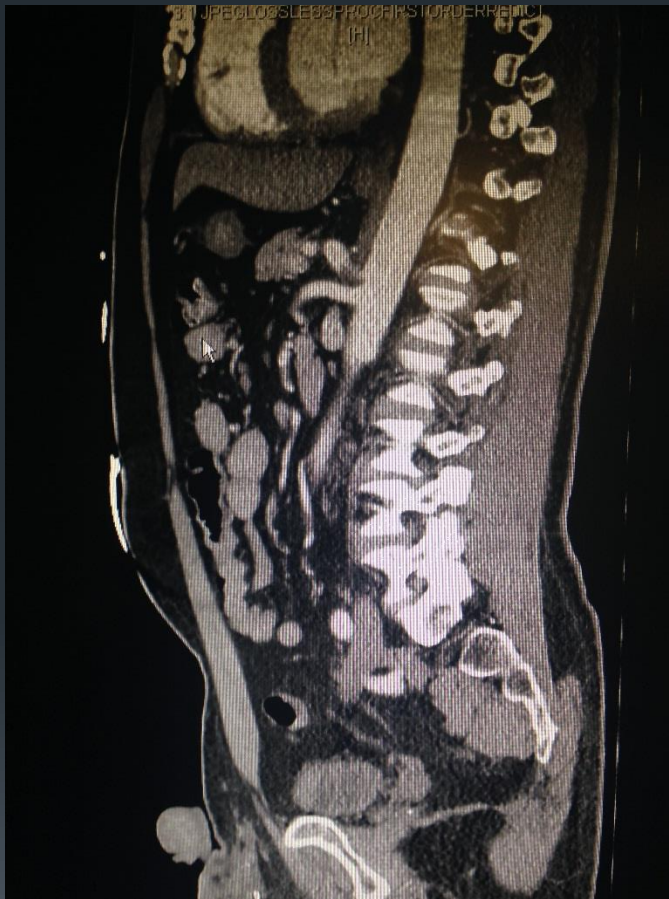
Initial Presentation

- 49 yo male presented with abdominal pain for 5 days
 - Constant epigastric pain with radiation to the back
 - Exacerbated by food consumption
 - 7/10 in intensity
 - Acute onset after a strenuous bike ride
- PMH: Nephrolithiasis
- Surgical: Knee arthroscopy
- Social:
 - Smoking status: Cigars 1-2/wk; denies cigarettes
 - Alcohol: 2-3 drinks/wk
 - Illicit drugs use: denies cocaine or any illicit drugs use

Physical Exam and Labs

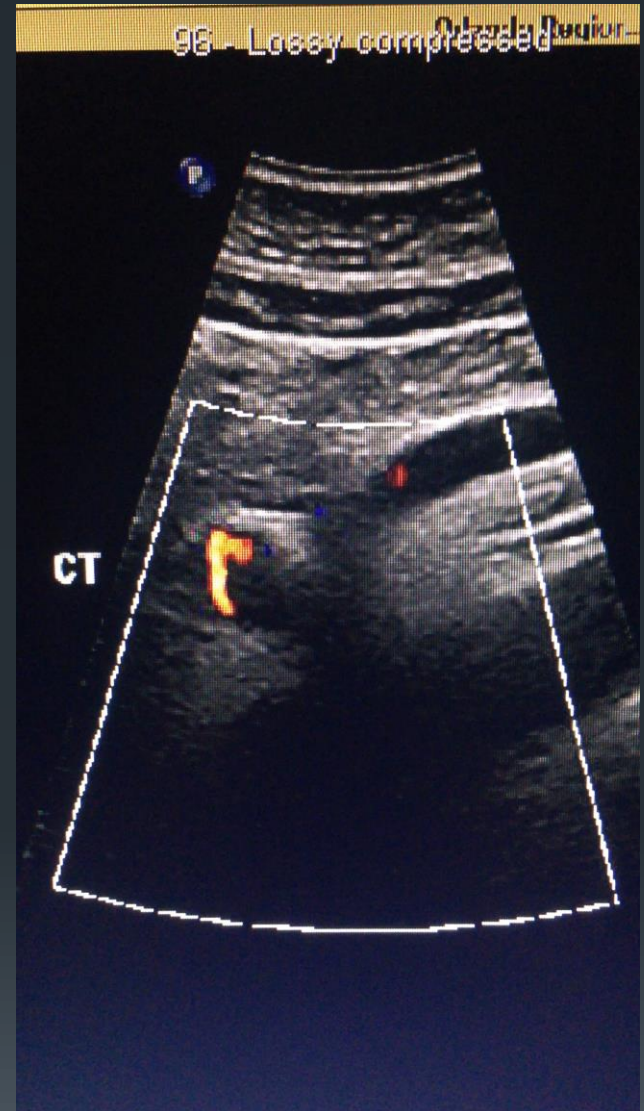
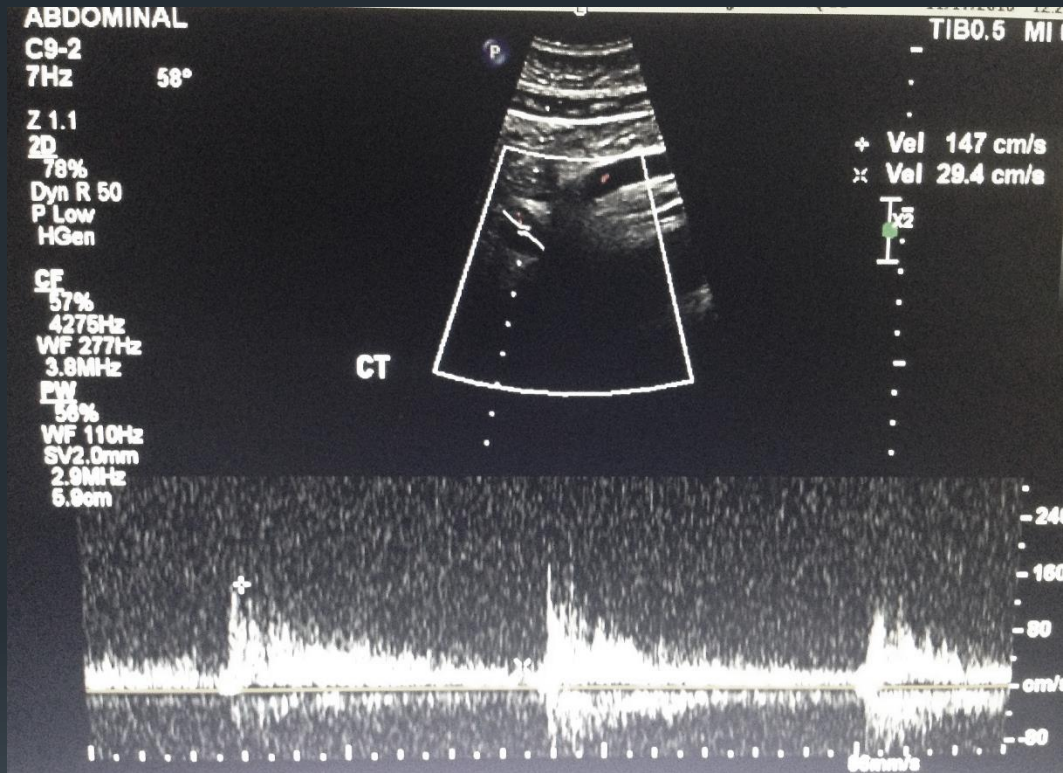
- VS: T 98.2, BP 139/95, HR 49, RR 20, O2 99% on room air
- Gen: alert, no acute distress
- CV: RRR; no murmurs, rubs, or gallops. Normal S1 and S2. No S3 or S4.
- Resp: Clear bilaterally
- Abd: Tender to palpation in epigastric region; Soft, non-distended; No pulsatile mass; (+) BS
- Labs: CBC, renal function, and troponin WNL

Imaging



- CT Abdomen and Pelvis
 - Focal dissection of celiac artery
 - Pseudoaneurysm involving ostium of the celiac artery

Imaging



Ultrasound

- Celiac artery size: 1.4cm
- Velocity at celiac artery: 147 cm/s
- No evidence of dynamic intimal flap

Spontaneous isolated celiac artery dissection

- <100 cases reported in the literature in the past 14 years
 - No large prospective studies
 - No clear guidelines for management
 - Clinical presentation + Lesions on imaging studies
- Isolated case reports and systemic reviews
 - Medical therapy vs. Endovascular vs. Surgical
 - Complications:
 - Aneurysm > thromboembolic events
 - Extension > stenosis/occlusion > compromised distal perfusion
 - Rupture of visceral artery

Options for treatment of spontaneous mesenteric artery dissection

H. Edward Garrett Jr., MD  

Division of Vascular Surgery, University of Tennessee-Memphis, Memphis, Tenn

Richard P. Cambria, MD, Section Editor

- Systematic review of 596 cases of MAD
 - 88 cases of isolated celiac artery dissection
 - Treatment:
 - 1) 26 cases- ???- did not report treatment
 - 2) 51 cases- **Medical therapy**
 - 6 failed- 1 due to aneurysmal dilatation
 - 3) 6 cases- **Primary endovascular therapy**
 - 3 due to ruptured aneurysms
 - 4) 5 cases- **Surgery**
 - 3 due to ruptured aneurysms
 - **6/11 (55%) cases**
 - Guidelines for elective treatment of non-ruptured aneurysm?
 - Conservative vs. Intervention

Symptomatic spontaneous celiac artery dissection treated by conservative management: serial imaging findings

Authors

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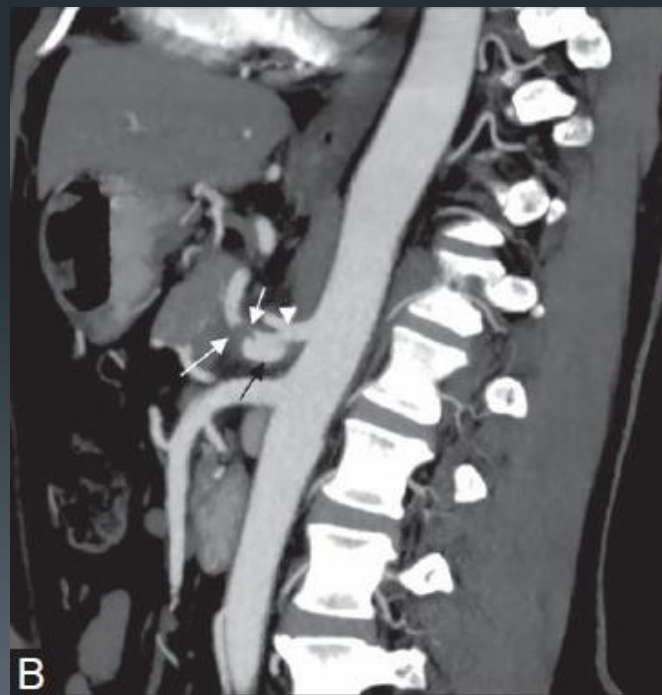
- Retrospective study- correlation of clinical characteristics with serial imaging findings treated by conservative management
- 6 cases of isolated celiac dissection **with aneurysm**
 - 5 patients- **Conservative management**
 - Asymptomatic on routine follow up [mean=16mo; range 5-32 mo]
 - 1 patient- **Endovascular stent**
 - Persistent abdominal pain
- All 6 patients
 - F/U CT: preservation of distal perfusion; regression of false lumen; no progression of aneurysm

Management and Follow-up

- Initial management
 - Clopidogrel 75mg x 3 months
 - Percocet 5mg/325mg PRN
- Follow-up (at 3 months)
 - No abdominal pain; BP=128/21
 - Ultrasound (at 3 months)
 - No dissection flap, stenosis, thrombus
 - No growth of aneurysm
 - Aspirin 81mg
 - Resumed bike riding; max HR:150
 - 6 months
 - Annually

Summary

- Optimal management of spontaneous isolated celiac artery dissection with pseudoaneurysm formation
- Factors to take into consideration:
 - Hemodynamic status
 - Involved vessels
 - Response to conservative treatments
 - Development of complications
- Goals of medical treatment:
 - Blood pressure control
 - Anticoagulation or anti-platelet therapy
 - Analgesic



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- Rama Krishnan R S, Murali K, Madan R, Francis G. CT imaging findings and endovascular management of isolated spontaneous dissecting aneurysm of celiac artery. *Indian J Radiol Imaging* [serial online] 2013 [cited 2017 Apr 28];23:234-7.