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## Background

- Segmental Arterial Mediolyis (SAM) is a rare non-atherosclerotic and non-inflammatory disease that often mimics vasculitis.
- It most commonly affects celiac artery and superior mesenteric artery. Here we describe an unusual presentation of SAM in an elderly woman.

## Case Presentation

- A 65-year-old female with history of smoking presented with sudden onset dull epigastric pain, radiating to the back, nausea, vomiting and decreased oral intake for three days.
- ROS was negative for other symptoms. Vitals: BP 140/87 mm Hg, HR 92/min, RR 16/min and saturating 96% on RA.
- Exam revealed epigastric tenderness without rebound tenderness or guarding. Labs: WBC 15,200/ $\mu$ L, AST 2173 U/L, ALT 2013 U/L, total bilirubin 0.6 mg/dl, albumin 3.7 and INR 1.1
- Infectious and rheumatological work up was negative.
- CTA abdomen demonstrated multiple large aneurysms involving bilateral hepatic arteries with diffuse irregularity and ectasia of the hepatic arterial system (Fig. A)
- She underwent coil embolization of left hepatic artery. (Figure B) The procedure was complicated by spontaneous thrombosis of right hepatic artery upon catheterization.
- Post procedure CTA abdomen showed reconstitution of flow within hepatic arterial supply via collaterals.
- Patient reported improvement in symptoms and labs revealed WBC count and transaminases returning to baseline within a week.

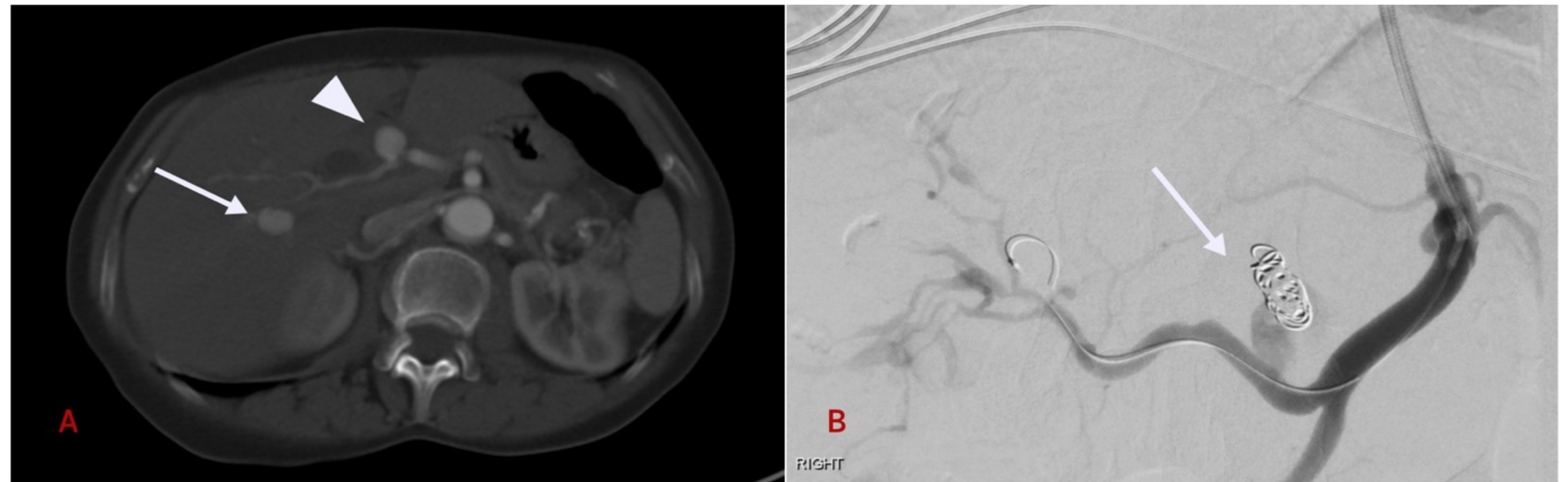


Image Caption: A) Computed tomographic angiography (CTA) of the abdomen demonstrated left hepatic artery aneurysm (arrowhead) and right hepatic artery aneurysm (arrow). B) Angiogram showing coil embolization of left hepatic artery (arrow).

## Discussion

- To the best of our knowledge, this is the first reported case with multiple pseudoaneurysms involving both hepatic arteries.
- Although, in our case, histologic confirmation was not done, clinical presentation, laboratory findings and radiologic pattern, led to the diagnosis of SAM.
- Early detection is the key in the prognosis of SAM, as clinical course tends to be unpredictable and complications of vascular injury including stenosis, dissection, aneurysm or rupture may occur.

## References

- Skeik N, Olson SL, Hari G, et al. Segmental arterial mediolysis (SAM): systematic review and analysis of 143 cases. *Vasc Med*. 2019;**24**:549–63.
- Kim HS, Min SI, Han A, Choi C, Min SK, Ha J. Longitudinal Evaluation of Segmental Arterial Mediolyis in Splanchnic Arteries: Case Series and Systematic Review. *PLoS One*. 2016;11(8):e0161182.