

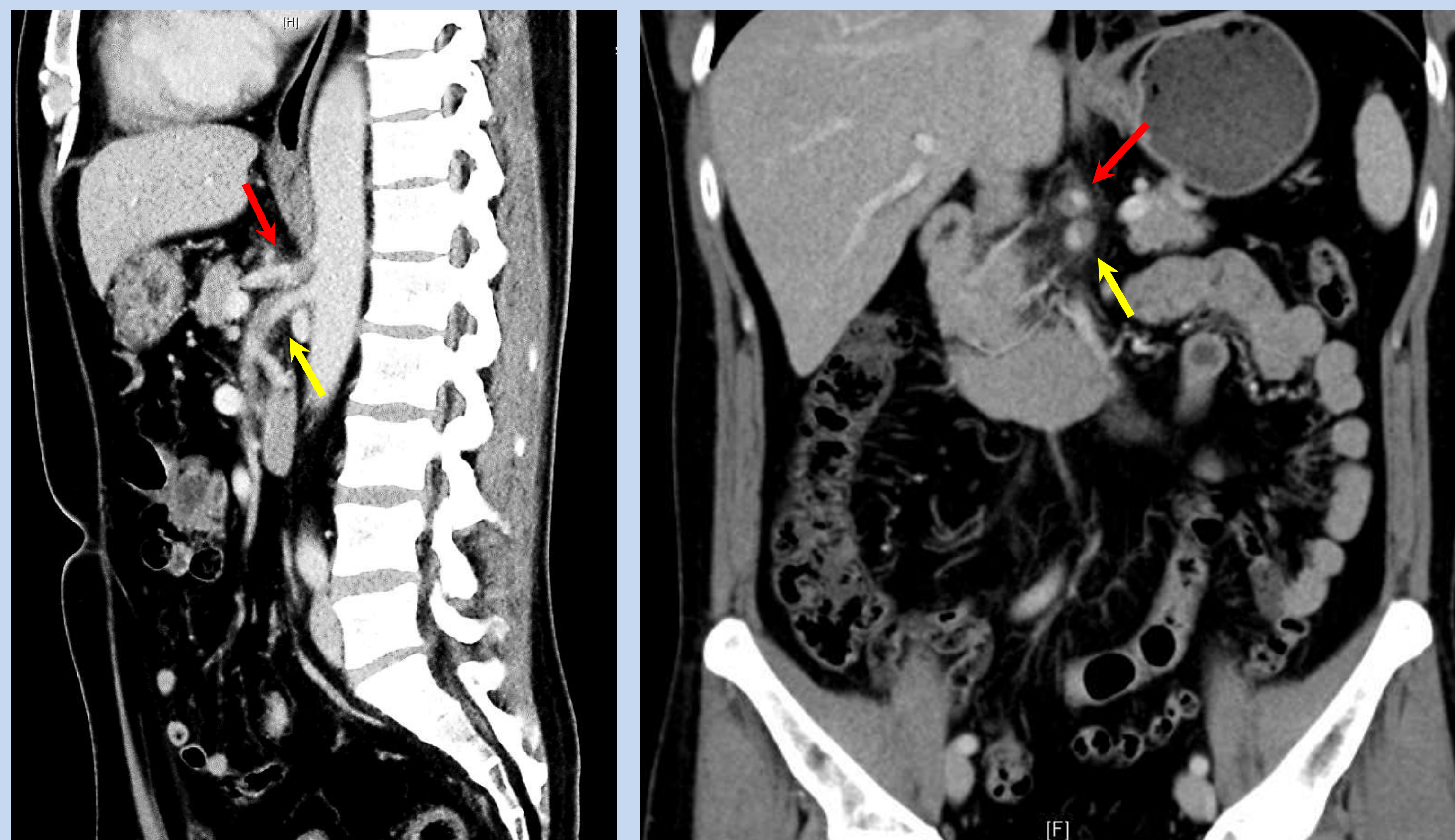
## Introduction:

Spontaneous isolated dissection of mesenteric arteries (SIDMA), including celiac artery (CA) or superior mesenteric artery (SMA), is uncommon, though increasingly discovered with widely use of high-resolution computed tomography (CT) and CT angiography (CTA). Concomitant spontaneous isolated dissection of both CA and SMA are rare. Although abdominal pain is the most common presenting symptoms, a significant percentage of patients are asymptomatic.

## Case Report:

A 43-year-old man, with past medical history of gastroesophageal reflux disease, urolithiasis and cigarette smoking, presented with sudden onset of epigastric pain. Both physical examination and point-of-care ultrasonography (PoCUS) were non-contributory. He was discharged after symptomatic treatment. He returned 7 days later because of relapsed and refractory symptoms. Physical examination showed an acute-distressed patient with vitals of respiration 20/min, pulses 63 beats/min, blood pressure 164/115 mmHg, and temperature of 35° C. His abdomen remained soft without tenderness. No abdominal aortic aneurysm, aortic dissection, ascites, obstructive uropathy, or gallbladder emergency was revealed by PoCUS. Microscopic hematuria was disclosed by urinalysis; however, plain abdomen X-ray and blood tests were unremarkable.

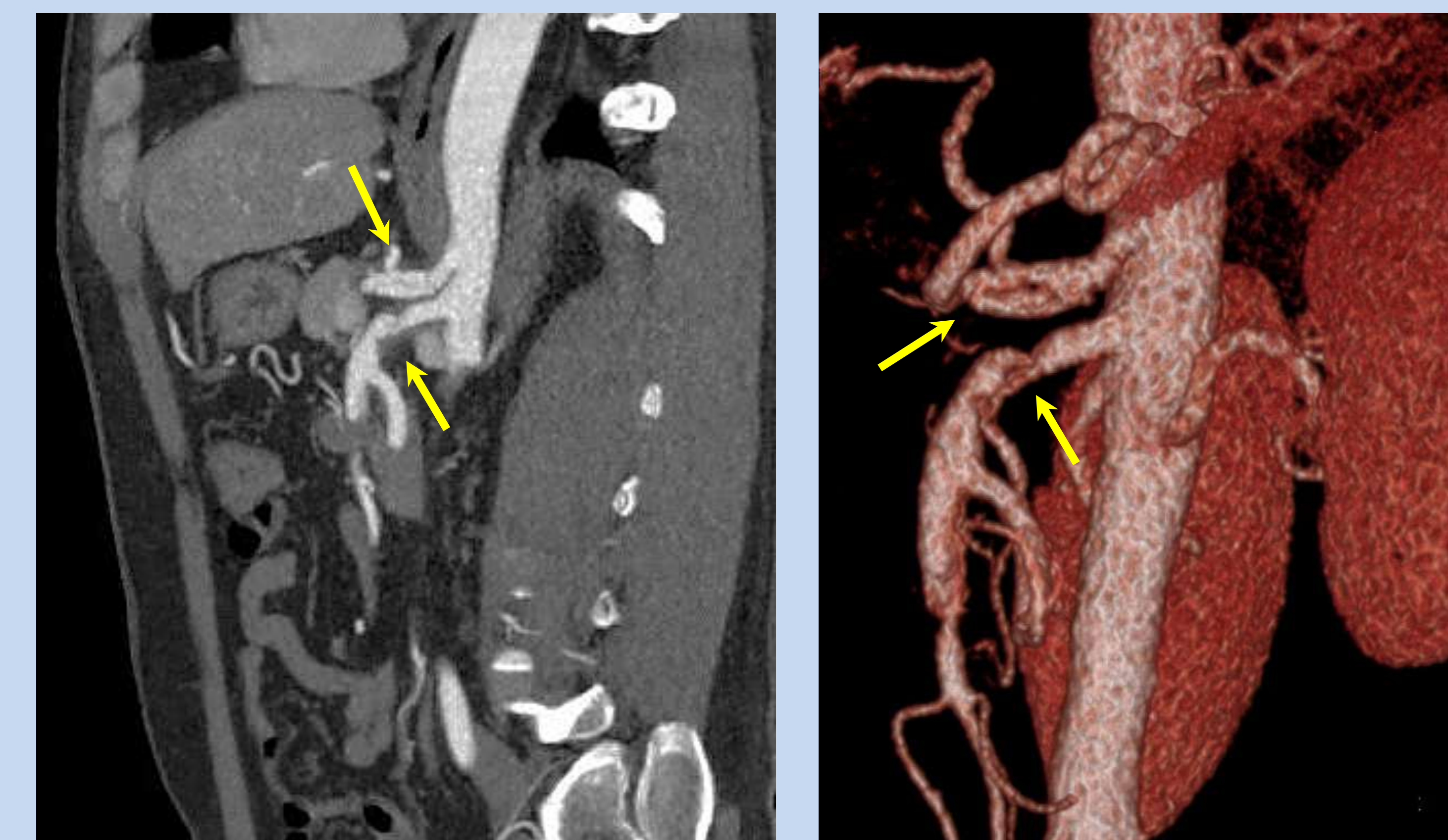
Abdominal CT showed thrombosed CA and SMA without sign of bowel ischemia (Fig. 1). Subsequent CTA disclosed segmental dissection with pseudoaneurysm of the proximal CA and proximal-to-middle SMA (Fig. 2). Anti-coagulation, control of hypertension was provided and he was admitted for close observation. He responded well to conservative treatments. Followed CT showed stationary vascular lesions and he was discharged after 5 days of hospitalization.



**Figure 1: Contrast abdomen CT**  
Thrombosed CA (red arrow) and SMA (yellow arrow)

## Discussion:

Although the exact mechanism of SIDMA is largely unknown, it was seen mostly in middle-aged men with medical history of arterial hypertension, hyperlipidemia and smoking.



**Figure 2: Subsequent CTA**  
Dissection of the proximal CA and SMA (arrow)

Significant aortic calcification or intimal plaques were rarely observed in these patients. However, angiographic findings suggestive of connective tissue disorders such as fibromuscular dysplasia, or segmental arterial mediolysis, were revealed in some of them. Most asymptomatic patients responded well to conservative treatment with or even without anti-platelet agent. Anti-coagulants are often provided to symptomatic patients, while endovascular or surgical interventions are reserved to patients with complications or refractory symptoms.

Severe symptomatic ischemia, bowel infarction, perforation, or mortality from SIDMA is not a common occurrence.