Isolated spontaneous superior mesenteric artery dissection is rare and most patients present with acute onset of abdominal pain. In the absence of complications, such as intestinal ischemia or frank rupture, non-operative management can be pursued. Due to the small number of cases, management strategies in the past have been poorly defined, and both operative and non-operative approaches have been employed.

We present the case of a 49-year-old male with history of hypertension, presenting with bilateral lower quadrant abdominal pain, nausea, emesis and non-bloody diarrhea. The patient denied prior abdominal surgeries, tobacco or illicit drug use. His history included hospitalization a year earlier for painless rectal bleeding, concerning for ischemic colitis, which was managed non-operatively.

Physical examination revealed only mild left lower quadrant tenderness, and the laboratory values were quite unremarkable. A CT scan of abdomen and pelvis with intravenous contrast showed a thrombosed dissection, originating 2 cm from the ostium of the SMA with extension into the second and third order branches (Figure 1). The patient was admitted for observation, non-operative management and intravenous hydration, along with bowel rest with therapeutic anticoagulation. His abdominal pain improved, and he was discharged home on hospital day 5 on aspirin and warfarin.

Repeat CT scan 3 months after this hospitalization continued to show the SMA dissection with resolution of the SMA thrombus (Figure 2). His warfarin was discontinued in exchange for a dual antiplatelet therapy.

Spontaneous SMA dissection is exceedingly rare with no universally agreed upon standard of care for treatment. Rather current literature recommends that clinical condition and imaging findings should guide management. Operative intervention should be reserved for failed conservative management, significant vascular compromise or an acute abdominal catastrophe. This case illustrates the use of non-operative management with anticoagulation for treatment of spontaneous SMA dissection as the primary choice, along with clinical observation. A good understanding of the available treatment options and judicious use of open and endovascular management helps ensure a favorable patient outcome.