Spontaneous Isolated Superior Mesenteric Arterial Dissection Presenting Sudden Onset and Prolonged Epigastric Pain with Normal Laboratory Findings

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Spontaneous isolated superior mesenteric arterial (SMA) dissection is a disease, which is almost benign but sometimes causes severe complication including intestinal gangrene. Almost all of the patients present with epigastric pain, but the specific diagnosis is initially challenging because of the rarity of the disease. Here we report a case with sudden onset and prolonged epigastric pain with normal laboratory findings.

A 34-year-old previously healthy man was presented our emergency room with a history of epigastric pain and back pain. The patient could not remain still due to the pain with blood pressure of 158/80mmHg, pulse of 98beats per minute, respiratory rate of 22breaths per minutes. Physical examination revealed epigastric tenderness without defense. Initial laboratory test including blood blood counts, metabolic panel, liver function test, and D-dimer were within normal range. We performed contrast-enhanced CT to assess arterial dissection, thrombosis and embolism, which are major and fatal causes of a sudden onset and severe upper abdominal pain. The enhanced CT showed wall enhancement of intestine and no arterial thrombosis, embolism and sign of intestinal ischemia. The pain gradually improved. Esophagogastroduodenoscopy performed on day2 was normal. The contrast-enhanced CT, which was reviewed for second look with radiologist, revealed a tiny dissection of SMA. Consequently, abdominal duplex ultrasonography clearly identified closed false lumen. There was no recurrence of abdominal pain. The patient discharged from our hospital on hospital day3.

Although mortality for all patients of spontaneous SMA dissection is low, some cases get severe and require intervention. In our case, although the dissection was difficult to identified initially because of the rarity, we finally identified the dissection in the second look of the CT. Physicians should know about this disease and should rule in the diagnosis when we see the severe epigastric pain.