Spontaneous Dissection of the Superior Mesenteric Artery

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A 57-year-old male was referred to our hospital presented with sudden onset of abdominal pain with radiation to back and nausea for four days. Physical examinations were unremarkable except mild epigastric tenderness elicited on deep palpation. Laboratory examinations were as follows: white cell count 13,300/mm³ with predominance of neutrophils (81.9%), creatinine 1.3 mg/dl, asparate aminotransferase 20 IU/L, total bilirubin 0.91 mg/dL, and lipase 205 IU/L (normal reference: 73-393 IU/L). The computed tomography of abdomen identified intimal flap (arrow) separating the true and false lumens of the superior mesenteric artery (SMA) (Fig. 1 and 2). Therefore, the diagnosis of spontaneous dissection of the SMA was confirmed and conservation therapy including anticoagulation has been prescribed. The patient’s abdominal pain gradually subsided and he remained uneventfully for six months after discharge.

Spontaneous dissection of the SMA was first reported by Bauersfeld in 1947. Because of the advancement of diagnostic modalities,
including such as multidetector row computed tomography (MDCT), multiplanar (MPR) imaging, reconstruction imaging, and CT angiography (CTA), this disease is now more frequently detected in common clinical practice\(^2,3\). However, the incidence of this disease is remains unknown because of lack of large-scale epidemiology study. Several etiologic factors, including atherosclerosis, fibrodysplasia congenital connective tissue disorder, and trauma were reported to be associated with SMA dissection\(^4\). Sudden onset of epigastric pain due to mesenteric ischemia is the most common clinical manifestation. Surgical treatment is recommended in the patients with acute symptom or suspicion of mesenteric ischemia, in contrast, conservative treatment can be considered in asymptomatic patients or patients with transient symptoms\(^5\). However, close observation is needed to follow up any sign of progression of mesenteric ischemia if patients receive conservative therapy.

### References