Dear Editor,

Isolated dissection of the superior mesenteric artery (IDS-MA) is an uncommon disease. Its incidence has increased due to the increased use of multislice imaging tests. It is a potentially treatable cause of mesenteric ischemia and the optimal treatment is still a controversial issue.

Case report

A 46-year-old man with a previous history of smoking (20 cig./day) was referred because of recurrent episodes of sudden high periumbilical abdominal pain. Upon examination, pain in the periumbilical region was found without peritoneal irritation sings. Blood pressure raised to 180/71 mm Hg. Hemogram, biochemistry, and venous blood gas analysis were strictly normal.

On abdominal angio-TC (Fig. 1), a low signal lineal image is detected inside superior mesenteric artery lumen, compatible with dissection, with good distal flow and good distal perfusion. All other vascular structures were normal.

The patient was transferred to intensive care unit (ICU) and anticoagulant (bemiparine 7.500 U each 24 hours), antihypertensive, and analgesic treatment was initiated. Pain events eased up progressively and oral tolerance was initiated uneventfully.

As clinical stability, absence of bowel ischemia and good flow distal to SMA dissection were established, we decided to continue with conservative management and not accomplish therapeutic interventionist measures.

The patient was released from hospital after 12 days. Anticoagulant treatment was maintained for a month, continuing with acetylsalicylic acid 100 mg each 24 hours. Blood pressure was suitably controlled with enalapril 10 mg each 24 hours. After a 2 years follow-up the patient is clinically stable and asymptomatic, with control imaging tests without changes.

Discussion

IDSMA is an uncommon disease. According to the angiographic finds it can be classified in:

- Type I: Patent true and false lumen revealing entry and re-entry sites.
- Type II: Patent true and false lumen without re-entry.
- Type IIb: Patent true lumen but thrombosed false lumen.
- Type III: Superior mesenteric artery (SMA) occlusion.

Fig. 1. Abdominal angioTC shows superior mesenteric artery dissection.
The majority of cases evolve satisfactorily with conservative management and a minority of them present uncontrolable abdominal pain and bowel ischemia that may require surgical or revascularization treatment.

Recent trials have proposed a therapeutic algorithm for IDS-MA based on published cases (2-6). To summarize (Fig. 2):

1. In asymptomatic patients, with incidental finding of IDS-MA, conservative management is recommended.
2. In symptomatic patients without evidence of bowel ischemia, medical treatment is the first therapeutic option, either with anticoagulation or antiaggregants and blood pressure and pain control. Anticoagulant treatment is preferred by some authors in order to avoid the thrombosis of distal vessels with deficient perfusion. Nevertheless, no evidence of significant difference between anticoagulation or antiaggregant treatment has been shown.
3. Symptomatic patients without evidence of bowel ischemia with medical treatment, in whom intense abdominal pain or diet intolerance persists, surgery or endovascular treatment may be a good alternative.
4. In symptomatic patients, with radiologic signs or clinical suspicion of bowel ischemia, surgical exploration of abdominal cavity and intestinal revascularization are mandatory.

References