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Small bowel angioedema. An unusual condition with interesting differential diagnosis

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Dear Mr Editor,

We present the case of a 35-year-old woman with a prior history of hereditary angioedema (HA) who was admitted to the emergency department with epigastric pain, vomiting and sweating.

Laboratory tests showed raised APR levels (CRP and leukocytosis).

An ultrasound examination was performed (Fig. 1) showing significant bowel wall thickening with obvious submucosal edema, without hyperemia. Extensive ascites was also documented.

CT scan ruled out intestinal obstruction and confirmed the presence of distended proximal and mid ileum loops with severe wall thickening and submucosal edema that showed significant subserosal enhancing. Also mesenteric stranding and severe ascites was noted (Fig. 1).

Given the patient's history and the radiological findings, a diagnosis of intestinal angioedema was proposed, initiating the specific treatment with C1 esterase inhibitor. Clinical improvement was seen, with resolution of symptoms within 24 hours.

Symptoms of small bowel angioedema include abdominal pain, nausea and vomiting (1). Physiopathologicaly, what happens is that the small bowel wall becomes thickened and swollen, because of mural edema. These changes can be appreciated in both ultrasound and CT as intestinal wall thickening with low attenuation of the edematous submucosa and preserved serosal and mucosal enhancement (2, 3). The findings can be segmental or diffuse and may be associated with intestinal distention as in this case (1, 2). Ascites is usually present (2, 3).

Radiological appearance is very similar to intestinal vasculitis. Differential diagnoses also include intestinal ischaemia, intramural haemorrhage, nephrotic syndrome and infectious and inflammatory bowel diseases (1, 2).

Understanding the condition and correctly identifying it, distinguishing it from others that may need a surgical approach, is important for optimal management, therefore avoiding unnecessary interventions.

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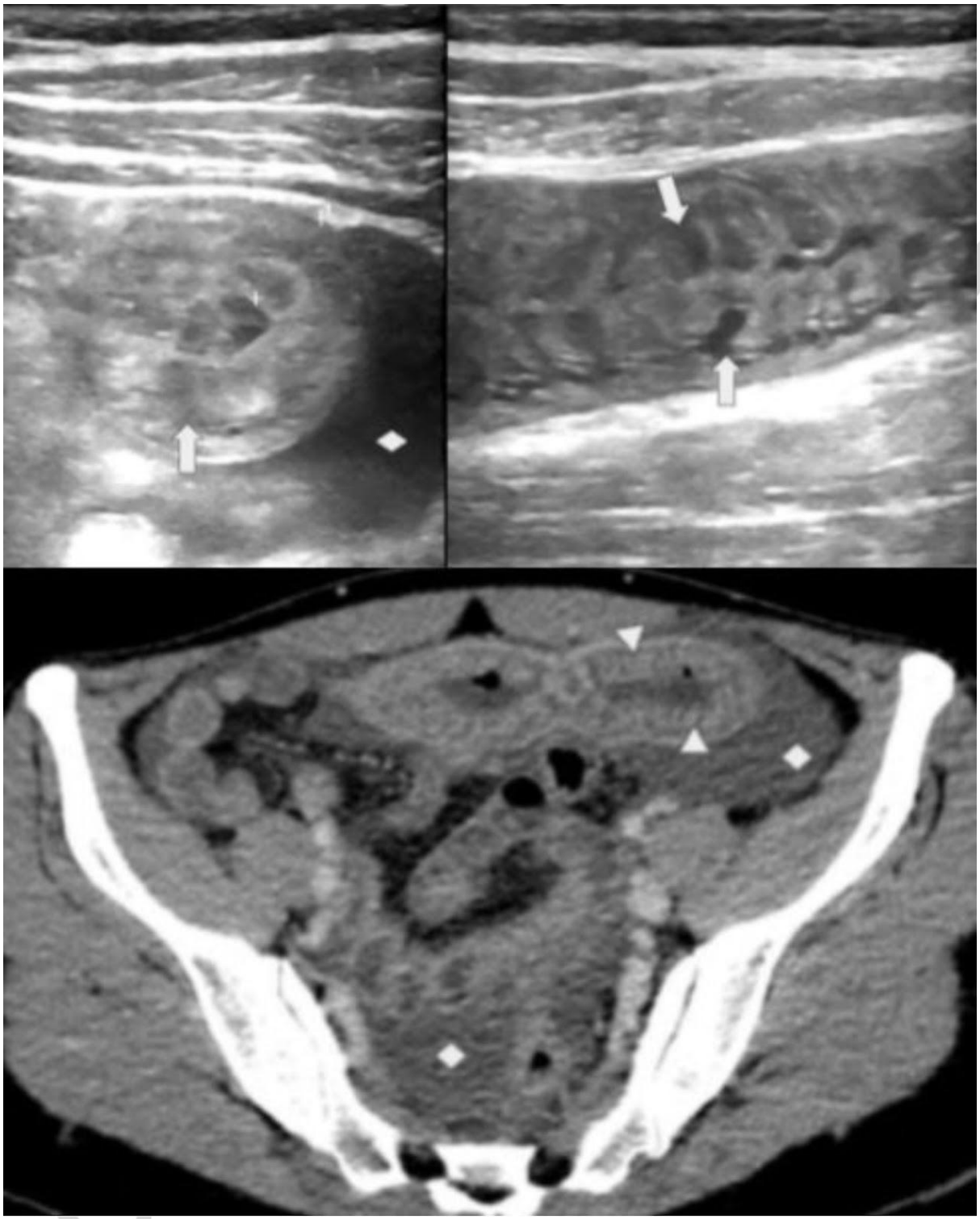

Fig. 1. Ultrasound abdominal examination (image above) at hypogastrium shows a large ileum segment with wall thickening and marked submucosal edema (arrows), preserving its normal layer pattern.

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Contrast enhanced CT scan (image below) shows wall thickened proximal and mid ileum loops with significant submucosal edema and maintained mucosal and subserosal enhancement (arrowheads) as well as moderate ascites (rhombus).