**LETTER / Abdominal imaging**

**Synchronous association of typical and transient mesenteric panniculitis with acute gastrointestinal attack of adult-onset Henoch-Schönlein purpura**

**Keywords** Mesenteric panniculitis; Mesentery; Abdomen; CT; Henoch-Schönlein purpura

**Dear Editor,**

Mesenteric panniculitis (MP) is an uncommon inflammatory condition of still unknown etiology that involves the adipose tissue of the mesentery [1,2]. Extensive terminology has historically been used to describe MP causing considerable confusion. Today the term "mesenteric panniculitis" is used worldwide and the typical imaging features of MP have been well described [2] and are now integrated by most authors [1,3,4]. Follow-up studies have shown a rather high stability of MP over time [2,5]. We hereby report an atypical case in which MP was synchronous with a first acute gastrointestinal attack of antineutrophil cytoplasmic antibodies (ANCA)-negative systemic vasculitis (adult-onset Henoch-Schönlein purpura [HSP]) and that resolved after steroid therapy.

A 74-year-old man presented with a one week history of increasing diffuse epigastric pain with loss of appetite, nausea and vomiting. Laboratory tests showed inflammatory syndrome. Twelve hours after admission he developed cutaneous purpura of the lower limbs that further extended to the arms and trunk and complained of diffuse arthralgias. Contrast-enhanced computed tomography (CT) showed thickening of the duodenal wall (Fig. 1) with a typical "target sign" (hypodense edema of the submucosa contrasting with hyperperfusion of the mucosa), which was associated with unambiguous signs of MP (Fig. 2). Gastroscopy confirmed purplish ulcero-nodular inflammatory thickening of the duodenal wall. Cutaneous biopsy revealed a typical leucocytoclastic vasculitis, thus confirming the diagnosis of HSP. MP was not present two years before on abdominal CT examination. Steroids resulted in rapid improvement in joint symptoms, abdominal pain and inflammatory syndrome. Control CT showed return to normal appearance of the duodenum and disappearance of MP after 12 days. However, the patient presented with marked worsening of cutaneous purpura with large areas of necrosis requiring surgical debridement, skin grafts and administration of cyclophosphamide.

Most cases of MP are considered as idiopathic, presumably benign and are merely asymptomatic. However, the association between MP and malignancy remains actively debated [1]. Recent studies reasonably conclude that fortuitous identification of MP is not a predictive indicator for the development of cancer and that MP in patients with existing cancer does not indicate worsened prognosis, that the prevalence of MP is much higher than initially previously estimated and finally that this prevalence is not significantly different in patients with cancer and those who do not have cancer [2–4]. CT diagnosis of MP is firmly established and based on five well recognized pathognomonic features comprising: a well-defined "mass effect" on neighboring structures (sign 1) constituted by mesenteric fat tissue of inhomogeneous higher attenuation than adjacent intra-abdominal fat (sign 2), containing small soft tissue nodules (sign 3). Typically, these nodules are surrounded by a hypo-attenuating fatty "halo sign" (sign 4) and a pseudocapsule may also surround MP (sign 5) [2]. These last two signs (4 and 5) are considered inconstant but extremely specific. HSP is a form of immune complex-mediated leukocytoclastic vasculitis involving the skin and other organs. HPS belongs to the more general category of ANCA-negative systemic vasculitis. It primarily affects children, and the occurrence in adults is rare and only sporadically reported. Gastrointestinal involvement is one of the most common manifestations of HSP in adults. Complete recovery usually occurs, and serious complications requiring surgery are rare [6]. The association of MP and HSP has been reported only three times [7]. This association is probably fortuitous but it contributes to reinforce the fact that MP may be an autoimmune disease. Our case finally emphasizes that MP may drastically improve under massive corticotherapy. In general, MP is asymptomatic, fortuitously discovered and thus remains untreated.
Figure 1. a, b: contrast-enhanced computed tomography (CT) images in the coronal plane show diffuse duodenal wall thickening (arrows) with a typical "target" appearance (submucosal hypoattenuation with enhancing mucosa); c: contrast-enhanced CT image in the coronal plane show typical mesenteric panniculitis (arrows); d: gastroscopy shows purplish ulcer-nodular inflammatory thickening of the duodenal wall suggestive of ischemia (arrowheads); e: contrast-enhanced CT image in the coronal plane shows complete normalization of the duodenal wall 12 days after corticotherapy; f: photomicrograph of skin biopsy specimen (Hematoxylin and Eosin, × 400) shows typical intradermal leucocytoclastic vasculitis with inflammatory neutrophilic infiltrate (arrowheads) developing around a small vessel (asterisks).
Disclosure of interest

The authors declare that they have no competing interest.

References


http://dx.doi.org/10.1016/j.diii.2017.03.002
2211-5684/© 2017 Editions françaises de radiologie. Published by Elsevier Masson SAS. All rights reserved.