Abdominal pain in systemic lupus erythematosus: about a rare cause

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Systemic lupus erythematosus (SLE) is an autoimmune condition with potential multisystemic involvement. Abdominal pain is a relatively common symptom, resulting either from inflammatory processes associated with disease activity, or from complications related to therapy or infections. Mesenteric panniculitis (MP) has been described as a rare but possible manifestation in patients with SLE[1].

The authors describe the case of a 26 years-old female, with a previous diagnosis of SLE and secondary Sjogren's Syndrome, treated with low-dose steroids and hydroxychloroquine 200mg id, with neither relevant medical nor surgical history. Her disease had been in remission for a year when she complained with peri-umbilical abdominal pain with 3 weeks of evolution, with scarce benefit from non-steroidal anti-inflammatory drugs. On examination, she was afebrile and presented abdominal distension with a palpable and tender peri-umbilical mass. Inflammatory markers were slightly increased [C-reactive protein 0.99mg/dL (normal range <0.5mg/dL) and erythrocyte sedimentation rate 28mm (normal range <20mm), with normal complete blood count]. Abdominal Computed Tomography (CT) revealed exuberant diffuse densification of mesenteric fat, involving parietocolic and retroperitoneum leaks, compatible with mesenteric panniculitis (Figure 1); multiple mesenteric, lumbo-aortic and il-

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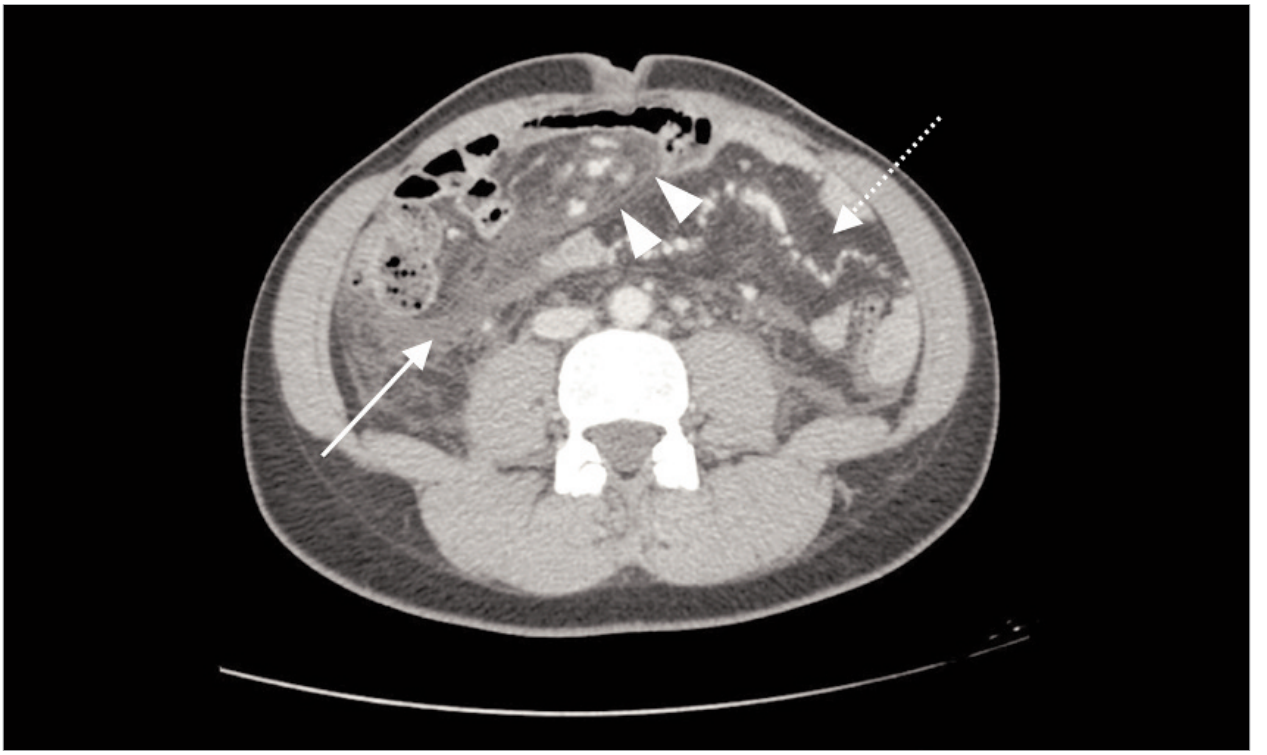

FIGURE 1. Abdominal contrast enhanced-CT, axial slice, showing higher attenuation of the mesenteric fat (arrow) compared with adjacent meso-colonic normal fat (dotted arrow); hyperattenuating pseudo-capsule (arrowheads).

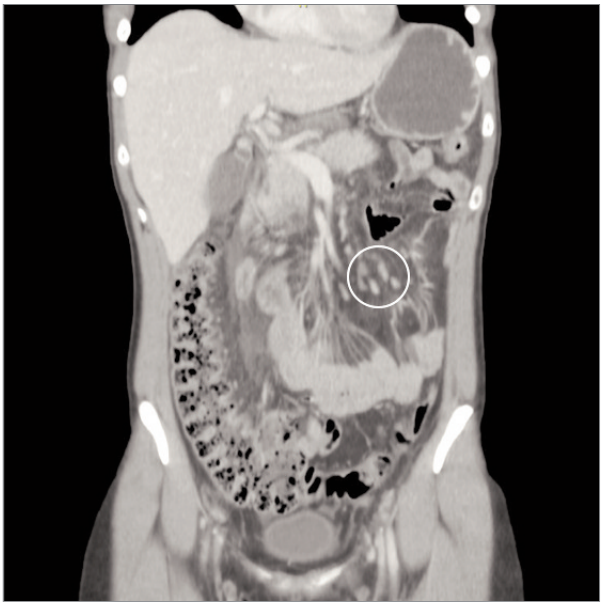

FIGURE 2. Abdomino-pelvic contrast enhanced-CT, coronal slice, showing non-adenopatic mesenteric lymph nodes (circle)

iac non-adenopathic nodes (Figure 2 and 3), with no other alterations. Inguinal lymph node biopsy was performed; histology retrieved reactive changes with inflammatory pattern (reactive follicular and interfollicular hyperplasia, plasmocytes in the medullary and along the paracortical regions) and fibrosis of the hilum, compatible with MP in probable relation with autoimmune process. Prednisolone 0.5mg/Kg/day was started with progressive improvement and resolution of abdominal pain after 6 months, with tapering until 5mg daily. By this time, the patient got pregnant and the palpable periumbilical lesion had complete regression. Abdominal magnetic resonance imaging was then performed and revealed improvement in the inflammatory pattern.

MP is a benign fibro-inflammatory process, histologically characterized by chronic inflammation of adipose tissue. The most common symptoms are abdominal pain and systemic symptoms, with a palpable tender abdominal mass presenting in some patients. Pathogenesis remains unclear, but the role of autoimmunity remains plausible[1]. It is a rare condition and, to our knowledge, only 5 cases have been described in the literature as a manifestation of SLE[1-5]. The diagnostic approach can be challenging, implying the exclusion of gastrointestinal complications from the disease and lymphoproliferative disorders, being CT the exam of choice. Although histological evidence re-

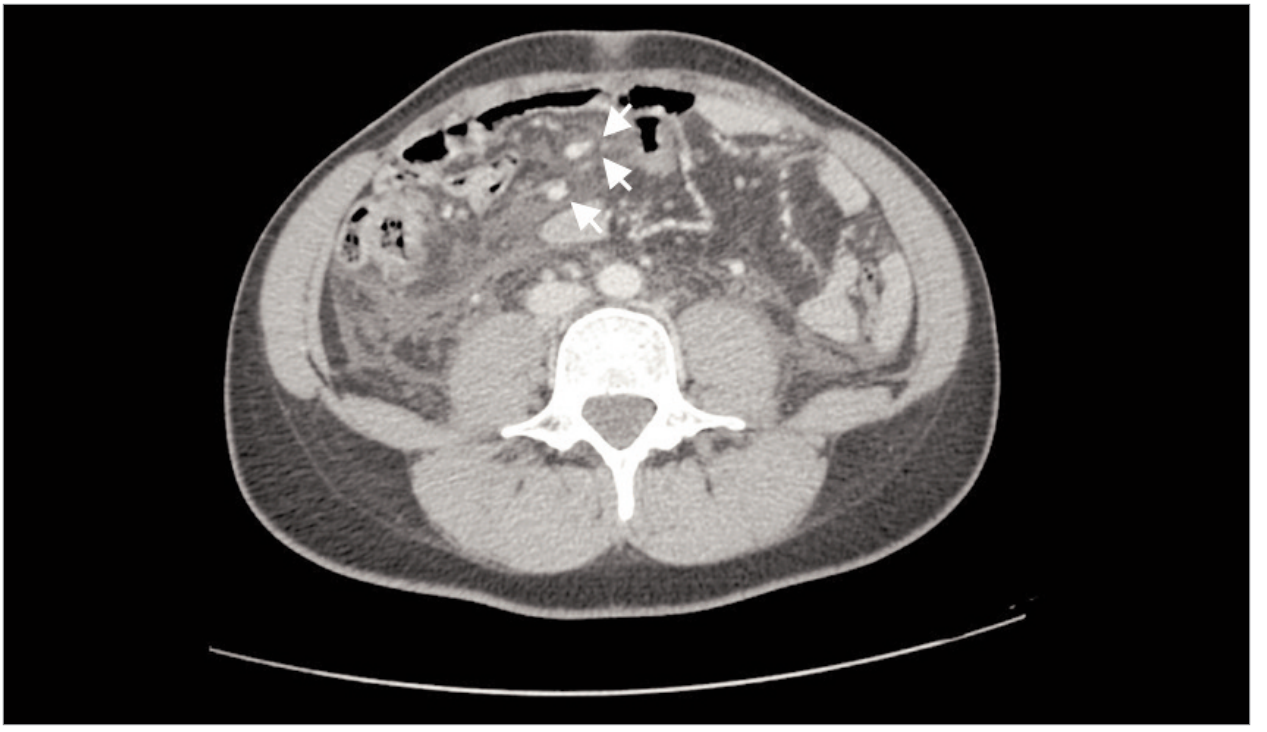

FIGURE 2. "Fat halo sign" on axial contrast-enhanced abdominal CT. Arrows show a ring of normal hypo-attenuating fat surrounding mesenteric vessels and lymph nodes.

mains necessary for definitive diagnosis, in this case, considering the imaging findings (4 Coulier CT criteria were met), the lymph node biopsy, the clinical response to treatment and the non-negligible risk of biopsy, the diagnosis of MP in the context of SLE was assumed. Corticotherapy has shown to be effective in patients with an inflammatory pattern. However, a slow response to treatment is expected, described in particular in patients with associated autoimmune diseases, reinforcing the possible involvement of autoimmunity in the pathogenesis of MP.

The therapeutic response is assessed by clinical evolution; both imaging and analytical progress are poor predictors of therapeutic accomplishment.

The authors emphasize the need to consider MP in patients with SLE; multidisciplinary approach is crucial for the diagnosis and therapy success.

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