



Image of the Month

Sclerosing mesenteritis by *Mycobacterium Genavense* mimicking a lymphoproliferative syndrome: The value of ^{18}F -FDG PET/CT

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A 39-year-old man with HIV presented fever, hepatosplenomegaly and mesenteric and retroperitoneal enlarged lymph nodes in abdominal CT (Fig. 1a,b), so a lymphoproliferative syndrome was suspected. Therefore a ^{18}F -FDG PET/CT (Fig. 1c) was requested to assess the initial staging and to locate the most accessible adenopathy for biopsy, revealing high uptake of FDG in mesenteric and retroperitoneal lymph nodes, spleen and bone marrow involvement, and normometabolic hepatomegaly. The biopsy of mesenteric adenopathies excluded lymphoma and confirmed the diagnosis of *Mycobacterium Genavense* (MG) infection. It was necessary to commence anti-tuberculosis therapy (Fig. 2).

The patient returned because of abdominal pain and a CT-angiography evidenced occlusion of the superior mesenteric artery

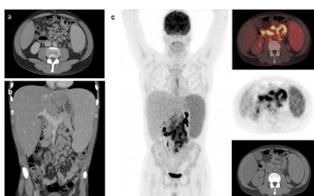


Fig. 1. Axial (a) and coronal (b) abdominal CT images presented hepatosplenomegaly and innumerable mesenteric and retroperitoneal adenopathies. ^{18}F -FDG PET/CT (c) showed hypermetabolic mesenteric and retroperitoneal lymph nodes, bone marrow and splenomegaly metabolically positive as well as normometabolic hepatomegaly. Increase uptake of FDG in the distal esophagus secondary an esophageal candidiasis demonstrated by biopsy.

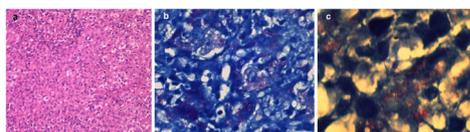


Fig. 2. Histological examination demonstrated in Hematoxylin-eosin stain (a) histiocytic population that have mostly replaced the normal lymph node and have foamy/granular cytoplasm. Clearly positive Ziehl-Neelsen at $\times 400$ (b) and $\times 1000$ (c) showed acid-fast bacilli stain pink, which are found mostly in the cytoplasm of foamy histiocytes.

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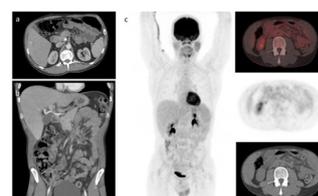


Fig. 3. Axial CT angiography (a) with occlusion of the superior mesenteric artery (asterisk). Coronal CT angiography (b) revealed an increase in the size of mesenteric and retroperitoneal adenopathies and striking retractile mesenteritis. ^{18}F -FDG PET/CT after treatment (c) demonstrated absence of active infectious process with hypometabolic residual abdominal adenopathies and normalization of bone marrow, spleen and liver, as well as fibrosis mesenteric transformation without FDG uptake.

(Fig. 3a). Therefore a stent was placed. Moreover, an increase in the size of mesenteric and retroperitoneal adenopathies and retractile transformation of the mesentery were observed (Fig. 3b). A new ^{18}F -FDG PET/CT (Fig. 3c) was performed to rule out reactivation of the infection. This showed the absence of pathological uptake of residual mesenteric and retroperitoneal adenopathies, with normalization of all other alterations. ^{18}F -FDG PET/CT demonstrated absence of active infectious process and revealed a sclerosing mesenteritis (SM) secondary to MG infection.

MG is a non-tuberculous mycobacteria, associated with AIDS patients with nonspecific gastrointestinal symptoms ranging from abdominal pain to bowel obstruction, which can rarely cause SM mimicking lymphoma or carcinomatosis [1]. The ^{18}F -FDG PET/CT allowed to demonstrate the absence of re-infection, fibrosis transformation without active disease, and establish the response to treatment.

Conflict of interests

The work was performed in Virgen del Rocío University Hospital and it has not been presented before. There are not conflicting interests or disclaimers and we have not received any financial support.

Reference

- [1] Borde JP, Offensperger WB, Kern WV, Wagner D. *Mycobacterium genavense* specific mesenteric syndrome in HIV-infected patients: a new entity of retractile mesenteritis? AIDS 2013;27:2819–22.