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Plasmablastic lymphoma in an HIV positive patient: colonic disease as an unusual presentation

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Dear Editor,

Plasmablastic lymphoma (PBL) is an aggressive and rare variant of diffuse large B-cell lymphoma associated with human immunodeficiency virus (HIV) infection. Here, we describe a case of PBL of the ascending colon in an HIV positive patient.

Case report

The patient was a 62-year-old male with a history of HIV infection category C3 diagnosed in 2014 with disseminated Kaposi's sarcoma associated in remission with antiretroviral treatment and current undetectable viral load.

He consulted in September 2021 due to progressive asthenia of months of evolution with weight loss and anorexia. The examination revealed multiple laterocervical lymphadenopathies, so it was decided to admit him to the hospital for further studies.

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An abdominal thoracic CT was performed and completed with PET-CT showing pathological supra and infradiaphragmatic lymphadenopathies with moderate homogeneous hepatosplenomegaly, as well as significant thickening of the walls of the cecum and ascending colon, ruling out a lymphoproliferative process (Figure 1A). A colonoscopy is requested in which large ulcerations with geographic borders and fibrin background are observed in the ascending colon (Figure 1B), which are biopsied for anatomopathological study, in which a diffuse proliferation of a plasmablastic cellularity accompanied by T lymphocytes and plasma cells is described (Figure 1C, D, E, F), confirming the diagnosis of PBL. Biopsies were also taken for virus culture, which were negative. The patient died eight months after diagnosis after progression to two chemotherapy lines.

Discussion

PBL is a clinicopathological entity that was initially described in 1997 (1), and it was recognized as a subtype of diffuse large B-cell lymphoma by the World Health Organization classification of lymphoproliferative disorders in 2008 (2). It is a rare variant with an aggressive clinical course and with predilection for the oral cavity, even if it was described at extra-oral sites (3).

The case that we present here is an atypical lymphoblastic lymphoma due to the colonic location, which has been described in a limited number of cases to date and has been mostly associated with the absence of HIV infection (4), despite it was initially reported among HIV-positive patients. The most challenging differential diagnoses of PBL are other hematologic disorders with similar morphologic and immunophenotypical features, being in favour of the diagnosis of PBL the weak/absent expression of B cell markers (CD20 and PAX5) and the positivity for plasma cell markers (CD38, CD138, MUM1, C-MYC) and T cell markers (CD3) (5).

Given the rarity of plasmablastic lymphoma of the colon, a high index of suspicion is required for its diagnosis and as it is very aggressive with a dismal prognosis, the early diagnosis and treatment will lead to better outcome.

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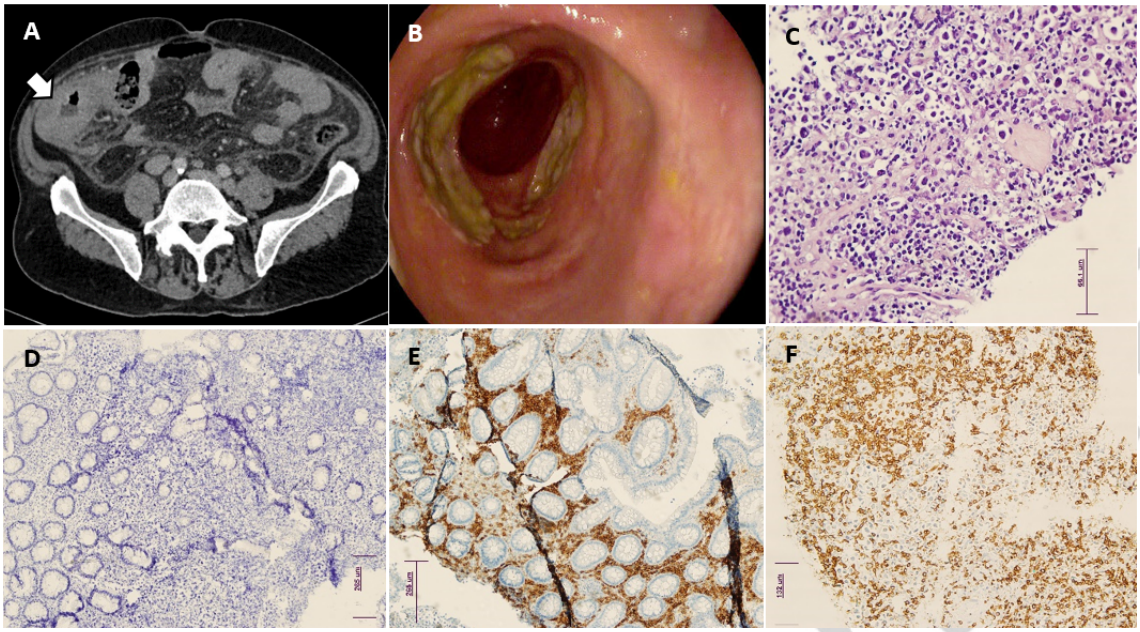

Figure 1: A: significant thickening of the walls of the cecum and ascending colon (arrow) in relation to a haematological process; **B**: large ulcerations with geographic borders and fibrin background in ascending colon; **C:** diffuse, sheet-like proliferation of a large, atypical, discohesive, plasmablastic looking cellularity (broad bluish cytoplasm and large rounded eccentrically located nucleus with prominent nucleolus), accompanied by T-lymphocytes and plasma cells (haematoxylin and eosin (HE) staining, original magnification x40); **D:** immunohistochemistry (IHQ),C D20 negative; **E:** immunohistochemistry (IHQ), CD138 positive; **F:** immunohistochemistry (IHQ), CD3 positive.