

PICTURES IN DIGESTIVE PATHOLOGY

Gastric plasmablastic lymphoma in HIV-negative patient

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CASE REPORT

An 82-year-old female patient presented with melena, epigastric pain, progressive abdomen fullness and weight loss (8 kg) in the past 2 months. During physical examination, cutaneous pallor was evident and a large abdominal mass in epigastrium was palpable. There was no peripheric lymphadenopathy or hepatosplenomegaly.

Blood count showed microcytic anemia and ferropenia (Hb = 7.5 g/dl, VGM = 79 fL; ferritin = 21 g/l, iron saturation = 23 %). Differential leukocyte counts, hepatic transaminase and lactate dehydrogenate levels were within normal limits.

Upper gastrointestinal endoscopy revealed large gastric body ulceration with areas of mucosal hyperemia and pallor (Fig. 1). Computed tomography of the abdomen (Fig. 2) showed diffuse wall thickening involving the gastric fundus, body and antrum.

Histological examination of the biopsy specimens revealed a diffuse, monomorphous proliferation of the tumour cells with features of immunoblasts, CD138, MUM-1, and *kappa* light chains positive (Fig. 3). These *plasmablast-like* features of tumour cells and lack of CD45 and B-cell associated antigens, disclosed the diagnosis of plasmablastic lymphoma (PBL).

Serology was negative for the human immunodeficiency virus (HIV), the electrophoretic pattern of serum proteins was normal and the bone marrow biopsy was free of lymphoma at histological evaluation.

The patient started treatment with CHOP (cyclophosphamide, doxorubicin, vincristine, and prednisone) chemotherapy, but died before the second cycle was given.

DISCUSSION

PBL is a very aggressive variant of diffuse large B-cell lymphoma initially described in the oral cavity of HIV-infected individuals (1). However, recent reports have described this neoplasm in seronegative and immunocompetent



Fig. 1. Upper gastrointestinal endoscopy: large gastric body ulceration with areas of mucosal hyperemia and pallor.

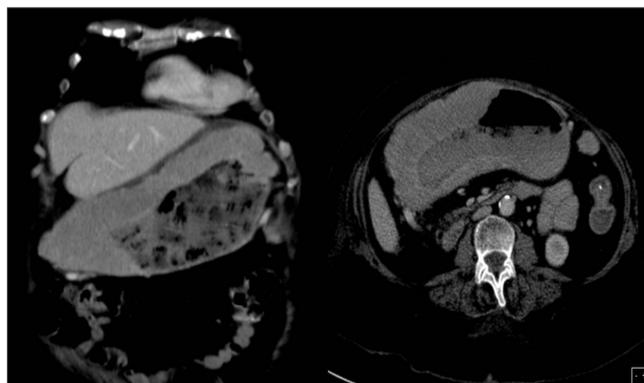


Fig. 2. Computed tomography of the abdomen: diffuse wall thickening involving the gastric fundus, body and antrum.

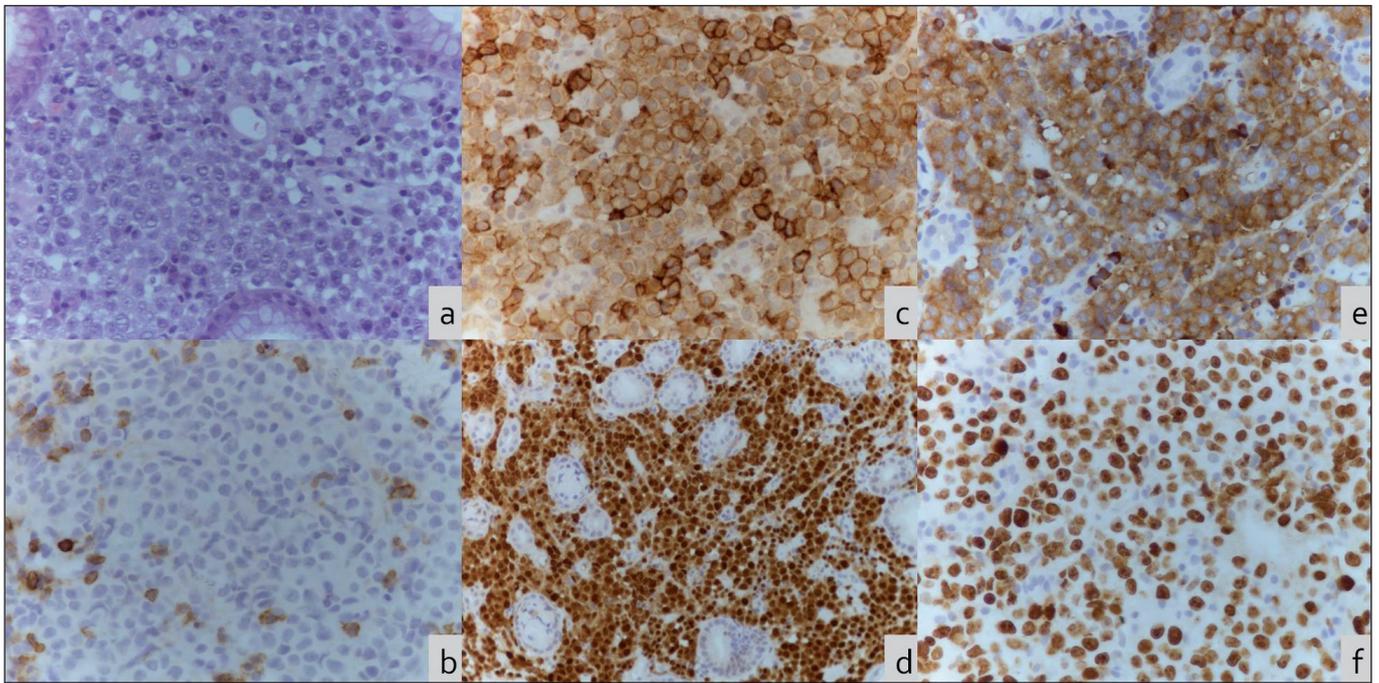


Fig. 3. A. Haematoxylin and eosin section shows large atypical cells with abundant cytoplasm, round nuclei, and occasional centrally located nucleoli (magnification 40x). B. Lack of CD45 antigen. C. D. E. *In-situ* hybridisation for CD138, MUM and immunoglobulin *kappa* is strongly positive in neoplastic cells. F. The proliferation index (assessed by Ki-67 stain) is approximately 90 %.

individuals (2) occurring in several other sites, including the gastrointestinal tract (2).

PBLs are diffuse large-cell tumours composed by plasmablast-like cells which lack CD20 and CD45, and diffusely express plasma cell-associated antigens (1). Biopsy, with accurate pathological and immunohistological testing and a high level of clinical suspicion are the cornerstone for correct diagnosis.

The prognosis of PBL is poor and intensive chemotherapy regimens do not seem to increase survival (3).

REFERENCES

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