

Title:

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The role of gastrointestinal endoscopy in Kaposi sarcoma

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Dear Editor,

This article aims to make endoscopists aware of the paramount importance of a prompt diagnosis of gastrointestinal Kaposi sarcoma (GI-KS). Patients with GI involvement have a two to five times higher risk of death and will benefit from chemotherapy to improve survival (1-3). However, current evidence shows that one out of three patients will have a false negative result, even with human herpesvirus 8 (HHV-8), since other entities such as gastrointestinal stromal tumors, angiosarcoma and lymphoma share macroscopic and histopathological characteristics. These cause a delay in treatment and significantly worsen the prognosis (4,5).

Upper and lower endoscopies were performed in human immunodeficiency virus (HIV) patients evaluated from January 2011 to December 2021 due to a high suspicion of GI-KS (i.e., cutaneous KS, lymphocyte TCD4 count below 200 cell/mm³) or GI symptoms. Endoscopic lesions were characterized during the procedure, and six to eight biopsies were taken from the most representative ones. A histopathologic diagnosis was established in the presence of all of the following: a) spindle cells in the lamina propria; b) arrangement in long fascicles separated by vascular clefts; and c) extravagated red blood cells. In the absence of any of these, immunochemistry was performed for HHV-8. A total of 81 patients were included with a mean viral load and a CD4 T-lymphocyte count (TCD4) of 243,646.36 copies/ml and 145.22 cells/mm³, respectively. GI symptoms were present in 46.91 % (n = 40), with diarrhea being the most frequent complaint in 33.33 % (n = 27). The most frequent locations of GI-KS lesions in descending order were the stomach, duodenum and esophagus, followed by the ascending colon and rectum. Nodular-type lesions were the most frequent in both the upper and lower GI tract. In 40 % (n = 32), HHV-8 staining was necessary to establish a diagnosis. Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) and accuracy for H&E were 60.49 %, 100 %, 100 %, 71.68 %, and 80.25 %, respectively. A trend was observed for a positive diagnosis from ulcers and nodules.

To our knowledge, this is the largest cohort of patients with GI-KS in the world. Our study suggests that in cases where a complete immunochemistry panel for KS is not available, HHV-8 remains as a bare minimum. However, other gastrointestinal lesions share histopathological characteristics. Therefore, we suggest taking biopsies from nodular and ulcer-type lesions to increase the probability to establish a histopathological diagnosis.

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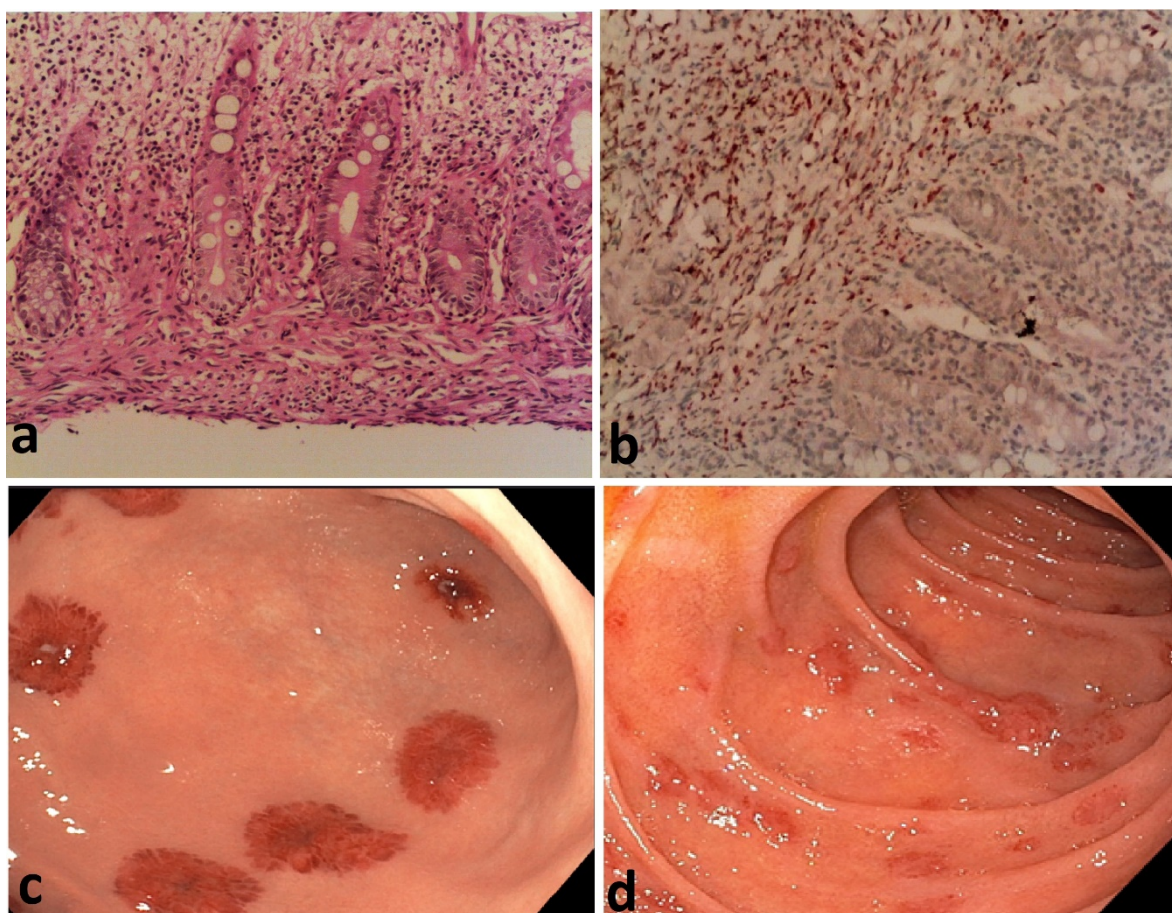


Fig. 1. A. Gastrointestinal Kaposi sarcoma (GI-KS) with H&E stain. B. GI-KS with immunohistochemistry for HHV-8. C and D. Endoscopic appearance of GI-KS in stomach and colon.