More Than Skin Deep: Kaposi Sarcoma of the Gastrointestinal Tract

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Learning Objectives

- To recognize symptomatic gastrointestinal manifestations of Kaposi sarcoma

Case Description

- We report a case presentation of 40-year-old male with no past medical history who presented with a 1-year history of dysphagia, abdominal pain, and decreased oral intake.
- Social history was significant for unprotected sexual intercourse. Physical exam was significant right upper quadrant abdominal pain and diffuse painless, purple, maculopapular skin lesions.
- Initial labs included: white blood cell 5.2 K/cumm (ref: 4.5-10), hemoglobin 12.9 g/dL (ref: 13.5-16.5), mean corpuscular volume 82.5 fL (ref: 82-97), platelet 220 K/cumm (ref: 160-360), blood urea nitrogen 16 mg/dL (ref: 8-22), creatinine 0.8 mg/dL (ref: 0.5-1.3), aspartate aminotransferase 18 U/L (ref: 10-50), alanine transaminase 19 U/L (ref: 10-50), alkaline phosphatase 87 U/L (ref: 40-129), total bilirubin 0.3 mg/dL (ref: <1), albumin 3.6 g/dL (ref: 3.5-5)
- Other labs included: positive HIV-1 antibody, HIV-1 RNA 343K copies/mL, and CD4 count of 38/cumm (ref: 494-1,694/cumm). Positive syphilis with 1:1 titer. Chlamydia, gonorrhea, and acute viral hepatitis panel were negative.

Radiologic Findings

- Computerized tomography (CT) of the abdomen and pelvis showed thickening of the ascending colon and prominent omental, mesenteric, inguinal lymphadenopathy (Figure 1).

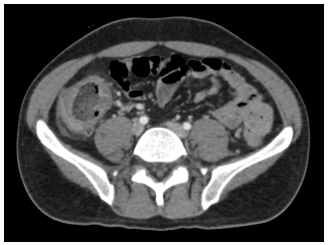

Figure 1: Inflammatory changes seen on CT in pericolonic fat with prominent enhancing adjacent lymph nodes.

Endoscopic Findings

- On esophagogastroduodenoscopy (Figure 2), severe grade D esophagitis and numerous scattered violaceous lesions seen throughout the gastric antrum, fundus, and duodenal bulb.

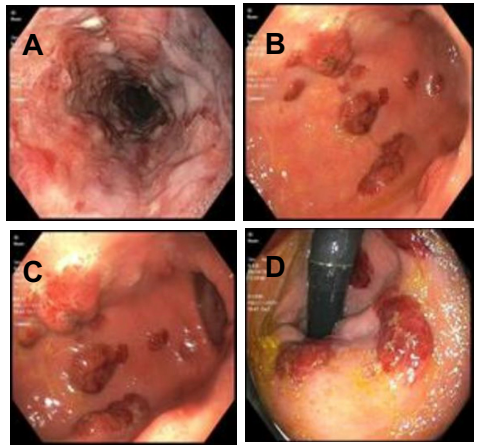

Figure 2: (A) Severe grade D esophagitis. (B-C) Numerous purple lesions throughout gastric antrum. (D) Retroflexion with additional violaceous lesions at the gastric fundus.

- On colonoscopy (Figure 3), several erythematous vascular lesions ranging in size from 2-10 cm from rectum to terminal ileum. Cecal and ascending colon biopsies confirmed Kaposi sarcoma with immunohistochemical stains positive for human herpes virus 8 (HHV-8).

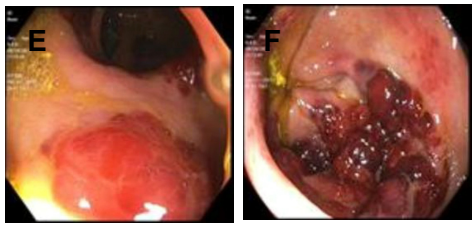

Figure 3: (E-F) Several erythematous to violaceous vascular lesions of varied sizes seen in throughout colon.

Skin Biopsy Findings

- Punch biopsy of an upper back lesion consistent with Kaposi sarcoma.

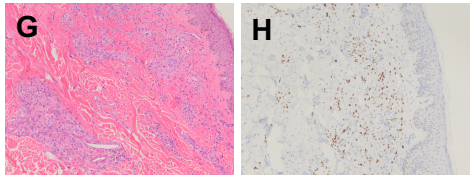

Figure 4: (G) Hematoxylin and eosin stain of the skin biopsy showing extensive, compressed, slit-like vascular channels with proliferation of spindled endothelial cells infiltrating deeper dermis. Extravasated erythrocytes are present. (H) Human herpes virus 8 (HHV8) immunohistochemical stain confirming Kaposi sarcoma.

Treatment and Follow-up

- He was started on highly active antiretroviral therapy (HAART) with emtricitabine, tenofovir, and dolutegravir for HIV as well as atovaquone and azithromycin for prophylaxis after consultation with infectious disease.
- He was also started on pantoprazole for grade D esophagitis and treated with penicillin G for late latent syphilis. He was discharged from the hospital and referred to medical oncology.
- On follow-up, the patient has completed 1 of 4 cycles of paclitaxel. Dysphagia and abdominal pain have improved.

Discussion

- Although gastrointestinal Kaposi sarcoma is usually asymptomatic, some patients present with abdominal pain and warrant endoscopic evaluation.[1]
- Visceral involvement of Kaposi sarcoma is associated with poor prognosis.[2] Treatment is usually palliative and aimed at improving symptoms and preventing progression.
- Depending upon severity and disease burden, HAART is the first-line therapy. Antiretrovirals may decrease proportion of new lesions, promote regression of existing lesions, and improve survival with or without chemotherapy.[3]

References

[1]Aorora M & Goldberg EM. Kaposi Sarcoma Involving the Gastrointestinal Tract. Gastroenterol Hepatol. 2010 Jul; 6(7): 459–462.
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[3]Biggar RJ et al. Incidence of Kaposi's sarcoma and mycosis fungoides in the United States including Puerto Rico, 1973-81. J Natl Cancer Inst. 1984 Jul;73(1):89-94.