AIDS-Related Kaposi’s Sarcoma of the Gastrointestinal Tract

A 36-year-old man with a 10-year documented history of HIV infection presented to the outpatient clinic to establish care. He had not received antiretroviral therapy. Review of systems revealed a weight loss of 110 pounds over the past 2 years and several years of intermittent, sharp upper abdominal pain. Six months before presentation, he had noted purple and brown lesions on his lower extremities that were increasing in number. He reported several months of progressive fatigue, anorexia, vomiting, diarrhea, and night sweats. Physical exam was significant for cachexia, right upper quadrant tenderness, and scattered 3- to 10-mm violaceous, hyperpigmented macules and papules, some of which were tender, on his lower extremities (Fig 1). A complete blood count was normal. Absolute CD4 count was 244 cells/μL, and HIV RNA viral load was 26,188 copies/mL. A hematoxylin and eosin stain of tissue from a punch biopsy of one of the skin lesions demonstrated proliferation of spindle cells in the submucosa and muscularis consistent with Kaposi’s sarcoma (KS). Esophagogastroduodenoscopy was performed to evaluate his abdominal signs and symptoms. His esophagus, gastroesophageal junction, duodenal bulb, and postbulbar duodenum were grossly normal. The gastric body contained friable erythematous nodules (Fig 2). Hematoxylin and eosin (200×) staining of a section from a biopsied nodule showed moderate chronic inflammation and a focal submucosal proliferation of spindle cells consistent with KS (Fig 3). Immunolabeling for human herpes virus-8 stained the nuclei of the spindle cells (Fig 4). The patient was started on highly active antiretroviral therapy. Eight months later, his HIV RNA viral load was undetectable, and CD4 count was 421 cells/μL. Concurrently, he developed intermittent black tarry stools and new violaceous, hypervascular lesions on the plantar surface of his right foot. Systemic treatment with pegylated liposomal doxorubicin was initiated.

While rare, KS is the most common malignancy in patients with AIDS. The astute clinician may note KS as the initial presentation of HIV infection, particularly among the 21% of HIV-infected patients who are unaware they have HIV. AIDS-related KS most frequently manifests in a multifocal mucocutaneous distribution involving the face, trunk, genitalia, and/or lower extremities. Visceral sites most commonly include the lung and gastrointestinal tract. KS may affect any part of the gastrointestinal tract, and may do so in the absence of mucocutaneous disease. In a series of 47 autopsies of patients with
AIDS with visceral KS at one hospital, the small intestine (14 of 47; 30%), colon (eight of 47; 17%), and stomach (seven of 47; 15%) were the most frequently involved gastrointestinal segments.\textsuperscript{4} Clues to the presence of gastrointestinal KS may be nonspecific (ie, abdominal pain, dyspepsia, diarrhea, nausea, and vomiting) or absent. Serious complications of untreated gastrointestinal KS include hemorrhage and perforation. Endoscopy should be considered in symptomatic patients. Diagnostic microscopic findings include spindle cells with positive nuclear staining for human herpes virus-8, a virus causally associated with KS.\textsuperscript{5} Systemic chemotherapy is standard of care for symptomatic visceral KS.\textsuperscript{6} Active agents include pegylated liposomal doxorubicin and paclitaxel.\textsuperscript{2,8}

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