Kaposi’s Sarcoma associated with intussusception of the small bowel: a case report and review of the literature.

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Introduction

Kaposi’s sarcoma (KS) was first described by Moritz Kaposi as an idiopathic multiple pigmented sarcoma in 1872 [1]. In its classic form it was considered as a vascular skin tumor found most commonly in Mediterranean and Eastern European men. It was rarely seen in the United States before the start of transplant medicine and the epidemic of HIV in the early eighties [2]. KS is radiosensitive and the incidence has dropped dramatically since the advent of highly active antiretroviral therapy [3].

Invasive Kaposi sarcoma (I-KS) related to Human Immunodeficiency Virus (HIV) usually occurs in the gastrointestinal tract. It has been reported to be the most common tumor of the digestive tract in HIV-infected patients [4]. In a review of 100 patients with KS, 10% presented with symptoms related to KS in the gastrointestinal tract [5].

Case Report

A 37-year-old homosexual male presented with progressive, non-radiating sharp central abdominal pain associated with nausea, vomiting and three episodes of non-bloody watery diarrhea. He was hypertensive and HIV positive, non-compliant with HAART. He was a non-smoker and denied ETOH and drug abuse.

On physical examination he was afibrile and hemodynamically stable. He had an enlarged non-tender left axillary lymph node. Abdomen was soft, non-tender, in all four quadrants and bowel sounds were audible. There was no palpable mass or visceromegaly. Stool guaiac was negative.

On laboratory investigations he was found to have mild microcytic anemia with hematocrit of 37% and normal basic metabolic panel, coagulation studies, liver function tests, amylase and lipase. Radiological imaging showed a normal chest X-ray but abdominal X-ray revealed multiple air fluid levels suggestive of small bowel obstruction.

Computed tomography of abdomen with contrast showed ileocolonic intussusception resulting in small bowel obstruction, no lymphadenopathy and mild ascites. He underwent laparotomy and was found to have telescoping of ileum (intussusception). Affected portion of small bowel was removed which on biopsy showed KS. Recovery was uneventful and the patient was advised to follow-up with Oncology and Designated AIDS Clinic for further management.

Discussion

KS was rare in the United States prior to the AIDS epidemic in early 1980s. Initially due to its unique geographical distribution and frequent association with homosexual men it was considered to be sexually transmitted [2]. Later, in 1994, Chang et al. found an association of KS with Herpes Simplex Virus 8 [5]. There are a number of mechanisms by which it can cause oncogenesis, one of which is cytotoxic induced B cell proliferation leading to angiogenesis [6]. Microscopically it consists of spindle cells, inflammatory cells and vascular slits with red blood cells extravasations.

In AIDS patients, KS is the most frequent tumor of the GI tract [2]. It has been reported through out the GI system, including the oropharynx, esophagus, stomach, small and large intestines, anus, liver, spleen and pancreas [7]. Upper GI tract is more commonly involved with an incidence of 50% involving the oral mucosa [8]. However it usually remains asymptomatic. In AIDS patients, on autopsy, KS involved the abdominal viscera in 77% of cases [9]. In symptomatic cases, it manifested as GI bleeding, intestinal obstruction, intussusception, perforation and protein loosing enteropathy [10].

The table below summarizes the 9 reported cases of KS presenting with intussusception. In 9 of the 10 cases, intussusception occurred in the small bowel. Half of the cases had cutaneous KS. Our patient had an enlarged lymph node, but declined biopsy.

<table>
<thead>
<tr>
<th>Authors/ Date</th>
<th>HIV Status</th>
<th>Area of the GI tract</th>
<th>Skin Manifestations</th>
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<tr>
<td>Tedeschi 1947</td>
<td>Unknown</td>
<td>Small Bowel</td>
<td>KS</td>
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<tr>
<td>White 1964</td>
<td>Unknown</td>
<td>Colon</td>
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<tr>
<td>Coetzee 1968</td>
<td>Yes</td>
<td>Jejunum Ileum</td>
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</table>

Conclusion

Despite being the commonest malignancy of the GI tract in HIV positive patients, KS rarely causes intussusception. Review of these cases shows that in 90% of cases intussusception involves the small bowel. Skin manifestations are only present in 50% of cases.

Considering the serious nature of intussusception one needs to keep a high index of suspicion when evaluating AIDS patients with abdominal pain. We recommend that KS should be considered in differential diagnosis of an acute abdomen in AIDS patients.

References:


A special thanks to Dr. Wang for the pathology slides

This case report was approved by SBH IRB