

## Introduction

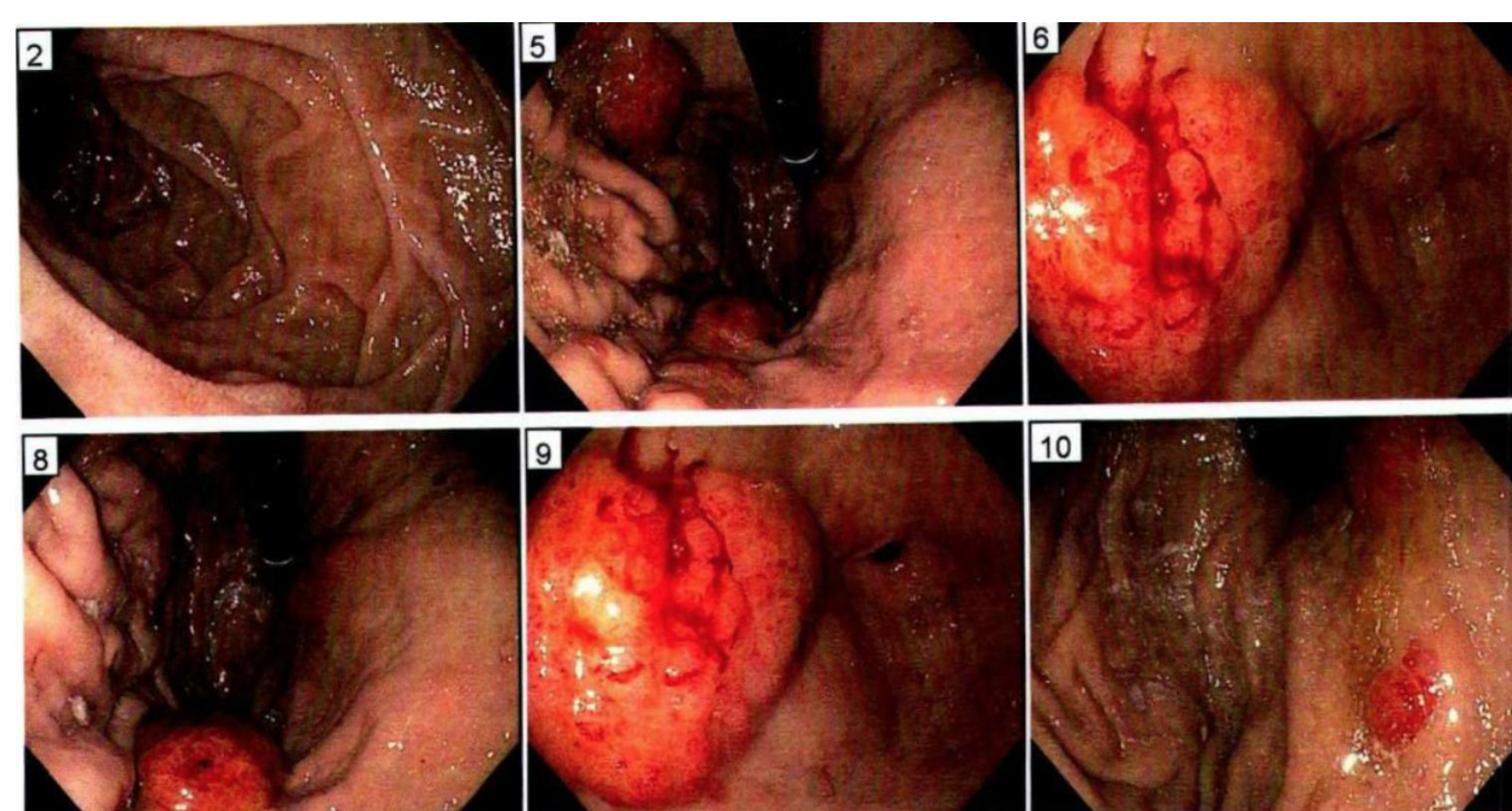
AIDS-related Kaposi's sarcoma (KS) is a vascular tumor which is characterized by angiogenesis, inflammation, and cellular proliferation. KS can involve any site in the body, with cutaneous disease being the most common presentation. This angioproliferative disease of the vascular endothelium has a propensity to involve visceral organs in the immunocompromised population. Kaposi's sarcoma typically presents on the skin of the upper and lower extremities. We present a rare case of a patient with gastrointestinal bleeding and diagnosis of Kaposi's sarcoma originated in the nasal turbinates.

## Case

A 39-year-old male with medical history of AIDS on HAART therapy, Hep C, and alcohol abuse presented with generalized weakness. He complained of chronic nasal congestion for 1 year, sinus pressure, sneezing and voice changes, worsening over 1 week. Vitals were normal, physical exam was significant for icteric skin and sclera, hepatosplenomegaly and diffuse leg swelling. Further evaluation revealed anemia, guaiac positive stools, low hemoglobin & hematocrit, elevated liver enzymes, Maddrey discriminate function of 55.6, coagulopathy, hypoalbuminemia and hyponatremia. EGD revealed multiple firm friable masses in the gastric antrum and body (fig.1). Biopsy of the mass showed fragments of gastric mucosa with focally disrupted architecture by a spindle cell neoplasm, positive for vascular markers CD31, CD34 and HHV8, suggestive of KS (fig.3). CD4 count was found to be 139 with viral load of 94,027.

Nasopharyngeal scoping revealed that the inferior nasal turbinate was edematous and had presence of a bluish, smooth, firm, non-pulsatile mass in the nasopharyngeal wall, possibly disseminated KS. CT Scan revealed moderate mucosal thickening and fluid within the right maxillary sinus (Fig.2). Mild mucosal thickening and opacification with mucosal erosion was seen within the left maxillary sinus. Bilateral ostio-meatal units were occluded.

Figure 1



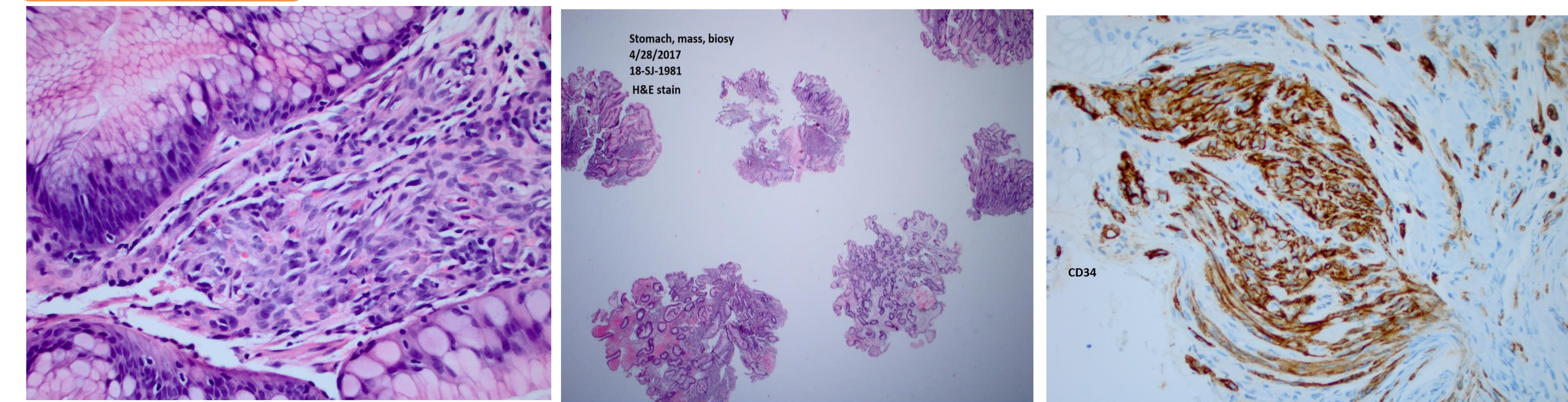
1) EGD findings: multiple firm friable masses in the gastric antrum and body

Figure 2



CT sinus findings of revealing moderate mucosal thickening and fluid within the right maxillary sinus.

Figure 3



Biopsy showing gastric mucosa with focally disrupted architecture by a spindle cell vascular neoplasm (40x, H&E) f) Immunohistochemistry staining showing positive staining of endothelial cells by C34 (40x, IHC)

During hospital course, HAART was held due to elevated liver enzymes, and MAC and PCP prophylaxis were started. Patient became septic and was found to have MRSA bacteremia. Due to underlying bacterial infection, chemotherapy was held and patient was intubated for hypoxic respiratory failure. Patient developed disseminated intravascular coagulation, H&H dropped, and was started on vasopressors for septic shock. Despite treatment, patient's condition continue to deteriorate and he expired.

## Discussion

KS has a tendency to present on the cutaneous surfaces such as the upper and lower extremities. Very few cases have been documented with primary Kaposi's Sarcoma originating in the nasal turbinates. It was suspected that the patient had KS in his nasal turbinates for over a year as he was complaining of nasal fullness for same period. Previous physicians had recommended symptomatic treatment without any improvement. Nasopharyngeal scoping suggested that the lesions seen in his nasal turbinates were indicative of KS due to patient's clinical condition, medical history, and the similarities of the KS lesions that were visualized in the oral cavity. Furthermore, the patient was unlikely to be able to generate an immune response that could cause the excessive amount of edema that was visualized, suggesting that edema was secondary to KS. A biopsy was not recommended due to patient's serious clinical condition.

Due to its low prevalence, there are no clear statistics of the incidence of KS that originates in the nasal turbinates. Similar cases have reported an excellent response to chemotherapy. Depending on the staging and extend of the disease, the general treatment of KS is symptom palliation, HAART, systemic chemotherapy, and steroids. However, in this case, our patient had further acute issues during the hospital course that led to his expiration without allowing us to properly treat the KS.

## References:

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- 2) Chen, K. H., Chen, T. D., Chen, C. W., & Lee, L. Y. (2014). Iatrogenic Kaposi's sarcoma in nasal cavity: a case report. *World journal of surgical oncology*, 12(1), 172.