Gone to Guts: A Case of Osteosarcoma with Metastasis to Small and Large Intestines Presenting as Recurrent Bleeding

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INTRODUCTION:

- Osteosarcomas are the most common bone tumors in children and adolescents.
- They are notoriously known to metastasize to lungs, however metastasis to gastrointestinal tract is extremely rare and only reported in sparse case reports.^{1–5}
- To our knowledge, we present one of the first cases of osteosarcoma that metastasized to the small and large intestines presenting as recurrent bleeding.

CASE DESCRIPTION:

- A 43-year-old man with medical history of metastatic osteosarcoma to the lungs and brain, initially diagnosed at the age of 20 years in the femur, presented to the hospital after a syncopal episode. Patient had been having intermittent melena for a month prior to presentation. Oncological treatments included ifosfamide, doxorubicin, carboplatin, and etoposide.
- On presentation, his vitals were significant for HR 102, and BP 85/40mmHg. Physical exam revealed a non-tender abdomen and rectal exam was positive for melena. His labs were significant for white count 17 x10³, Hb 5.3, Hct 18.3, MCV 80, Na 135, K 4.2, CO2 26, BUN 33, Cr 0.8, BUN/Cr 34, AST 22, ALT 10, ALP 49, Albumin 3.0, total bilirubin 1.1, INR 1.32, Lactic acid 3.07. Chest X-ray revealed metastatic lung nodules.
- An enteroscopy showed no active bleeding up to proximal jejunum. A 2cm ulcerated nodule was noted in the jejunum which was not actively bleeding (Image A). Colonoscopy with deep cannulation of terminal ileum (40cm) revealed old blood throughout. Again, multiple similar 2-3cm ulcerated transverse and hepatic colon nodules were noted which were biopsied (Images B). Pathology revealed spindle-shaped cells with marked nuclear atypia with poor immunoreactions indicating poorly differentiated sarcoma. CT angiography of the abdomen showed evidence of metastatic nodules in the small and large bowel. Patient's family opted for comfort measures given his poor surgical candidacy and overall prognosis.

DISCUSSION:

- In line with other sparsely reported cases, our case presented with luminal bleeding from multiple ulcerated nodules.^{1,3,4}
- To our understanding, this was one of the first cases that had simultaneous involvement of small and large intestines.
- With the growing incidence of osteosarcoma, it would aid gastroenterologists in understanding clinical presentation and endoscopic appearance to timely recognize this condition and thereby impact outcomes.

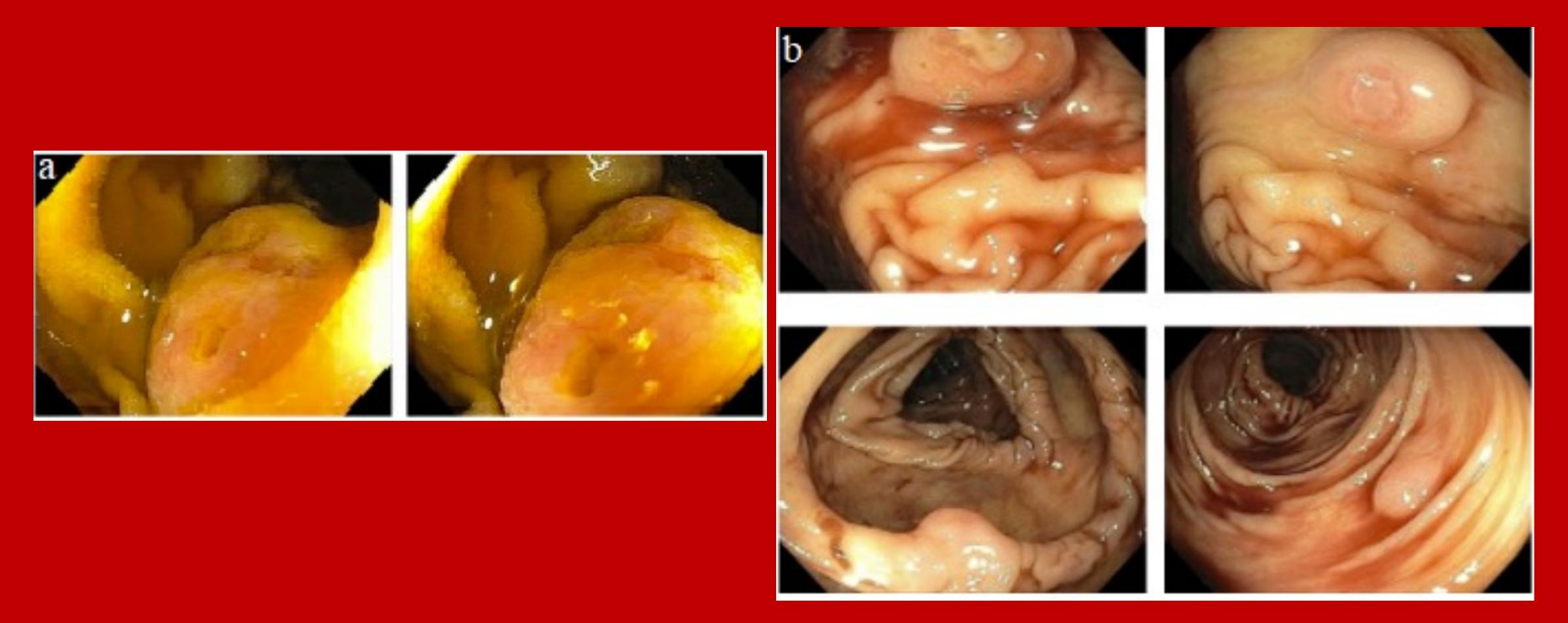
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Metastatic Osteosarcoma presenting as recurrent bleeding from Both Jejunum and Colon



A) EGD Images showing a 2cm ulcerated jejunal nodule B) Colonoscopy showing 2-3cm ulcerated transverse and hepatic colon nodules