Myeloid sarcoma of the sigmoid colon: an unusual presentation of a rare condition

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Case

A 63-year-old Caucasian male presented with 6-week history of left lower quadrant (LLQ) pain, constipation, and 30-lbs weight loss. PE: LLQ tenderness, no guarding/rebound. Labs: WBC 70 K/µL, Hb 8.6 g/dL, platelets 43 K/µL; labs were normal 6 months ago. CT A/P: sigmoid colon (SC) wall thickening, surrounding stranding and adjacent rim-enhancing fluid collection containing gas bubbles. Patient was started on IV antibiotics. Bone marrow biopsy (BMB): acute myeloid leukemia (AML) with monocytic differentiation, normal cytogenetics, FLT3 negative, and NPM1 mutation. Flexible sigmoidoscopy: infiltrative near-obstructing large mass in SC (Fig.1A&1B). Biopsies: acute/chronic inflammation, no malignancy. Patient became hypotensive and developed fever/chills. Patient underwent SC colectomy, descending colon colostomy, rectal Hartmann's pouch, and drainage of pelvic abscess. Pathology: myeloid sarcoma (Fig.2A&2B), CD68 PG-M1 + (Fig.2C), CD68 KP1 +, lysozyme +, and colon perforation. Patient received

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induction followed by consolidation therapy. Subsequent BMB showed no residual disease. Patient underwent colostomy takedown 1 year later.

Myeloid sarcoma (a.k.a granulocytic sarcoma or Chloroma) is a rare tumor resulting from extramedullary invasion of granulocyte precursor cells. It occurs more commonly in patients with AML, and less commonly in those with MDS and myeloproliferative neoplasm. Infrequently, extramedullary disease is the only site of involvement. The most common sites are the skin, bone, soft tissue, and lymph nodes. Involvement of the gastrointestinal tract is relatively rare [1].

Disclosure:
Financial disclosure: None to report.
Informed consent was obtained for this case report.

CONFLICT OF INTERREST

Conflict of interest: None to report.

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References

[1]. Pireli SA, Orazi A, Falini B. Myeloid sarcoma. In: Swerdlow SH, Campo E, Harris NL, eds. WHO classification of Tumours of Haematopoietic and Lymphoid Tissues. 4th ed. Lyon, France: IARC Press, 2008: 140-141.

Legends (these are included here just for clarification, I understand that these won't be included in the final version).

Fig. 1A & Fig. 1B. Endoscopic view showing an infiltrative near-obstructing large mass in SC, at 20 cm from the anal verge with edematous and erythematous mucosa.

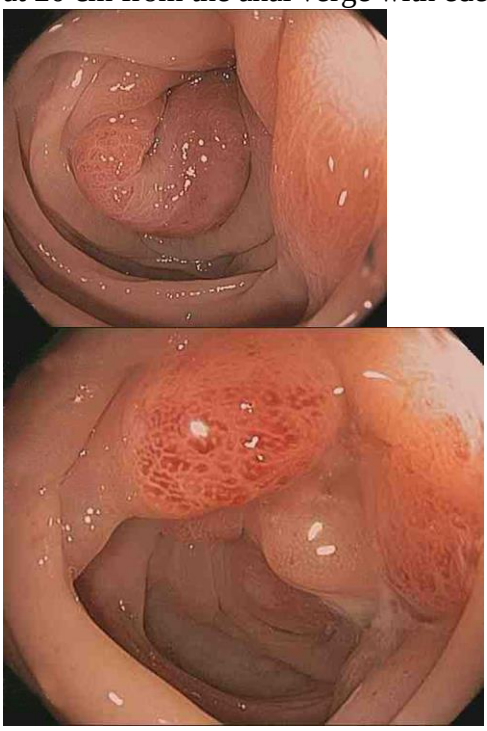

Fig. 2A. Low power photomicrograph showing myeloid blasts, and maturing granulocytes fills and expends the colon wall (H&E, 20 x).

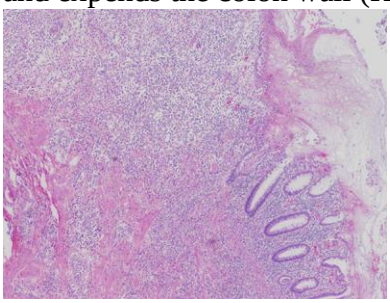

Fig. 2B. High power photomicrograph showing blastic, hyperchromatic, and pleomorphic cells of the granulocytic series infiltrating the lamina propria of the colonic mucosa (H&E, x 400).

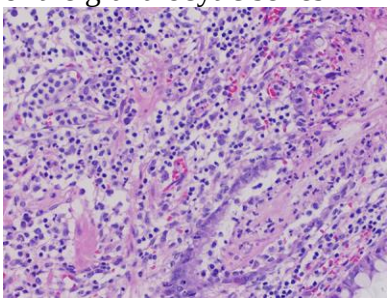

Fig. 2C. CD68 PG-M1 positive stain.