

## Multiple Myeloma Causing Gastric Polyposis

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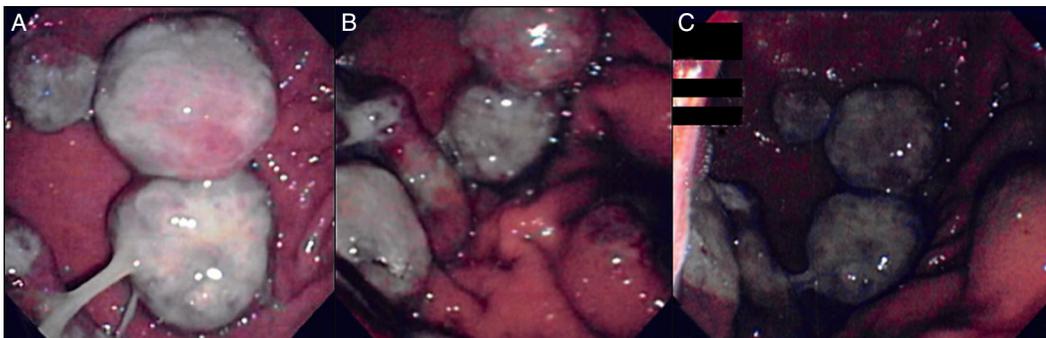
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### CASE REPORT

A 71-year-old white man with Durie-Salmon stage IIIB multiple myeloma diagnosed 1 year prior presented with obstructive jaundice. He had received multiple cycles of chemotherapy. Abdominal computed tomography scan showed a 2.5-cm pancreatic head mass with mild biliary and pancreatic duct dilatation. The patient was scheduled for endoscopic ultrasound (EUS) with fine-needle aspiration (FNA) and endoscopic retrograde cholangiopancreatography for biliary drainage. Endoscopic examination of the stomach revealed multiple large, pedunculated, and sessile polypoid lesions seen diffusely throughout the stomach, some of which were ulcerated (Figure 1). EUS examination of these lesions revealed hypoechoic mucosal and submucosal masses within an isoechoic rim. No communication with the muscularis propria was noted. Biopsies and FNA of the gastric polyps were consistent with plasmocytoma (Figure 2). EUS exam of the pancreas showed a 35.6 mm x 27.9 mm hypoechoic and poorly demarcated pancreatic/parapancreatic mass. FNA of this mass was consistent with metastatic multiple myeloma. Biliary drainage was performed using a 10-French x 10 cm plastic biliary stent. Given the overall prognosis and progression of the disease, the patient was referred for hospice care, where he died 2 months later.

Luminal gastrointestinal involvement in multiple myeloma is extremely rare and occurs in almost 5–7% of all extramedullary plasmacytoma cases.<sup>1–3</sup> It tends to occur in more aggressive cases.<sup>4</sup> The small bowel is the most frequently affected site.<sup>2</sup> In a series of 161 cases of extramedullary plasmacytoma, 12 were gastrointestinal in origin, and only 3 cases were gastric.<sup>2</sup> Reported cases of gastric involvement include diffuse gastric infiltration, gastric ulceration with bleeding, and gastric outlet obstruction secondary to pyloric mass.<sup>1,4,5</sup> In addition, gastric polyposis has been rarely reported.<sup>6</sup> Our case demonstrates endoscopic and endosonographic features of diffuse gastric polyposis diagnosed incidentally in a patient with stage IIIB multiple myeloma and presenting with obstructive jaundice secondary to pancreatic metastasis.



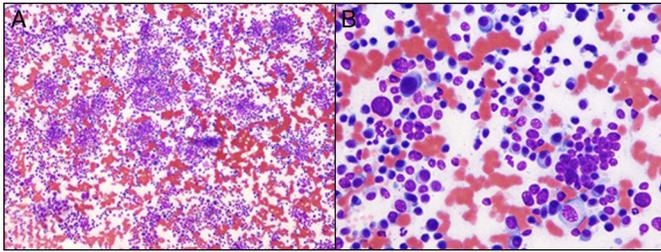
**Figure 1.** Endoscopic view of multiple gastric polyps throughout the stomach.

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**Figure 2.** (A) Aspirated material from the gastric mass is hypercellular with plasmacytoid cells arranged singly and in loose aggregate (diff quick stain 100x). (B) Higher magnification of aspirated material reveals neoplastic plasma cells displaying marked pleomorphism, binucleation, and prominent nucleolus (diff quick stain 400x).

## DISCLOSURES

Author contributions: T. Hammad wrote the manuscript and is the article guarantor. H. Abdulwahid and M. Nawras provided the images. A. Renno and E. Batdorff reviewed the literature. A. Nawras edited the manuscript.

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Informed consent was obtained for this case report.

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## REFERENCES

1. Sloyer A, Katz S, Javors FA, Kahn E. Gastric involvement with excavated plasmacytoma: Case report and review of endoscopic criteria. *Endoscopy*. 1988;20(5):267-9.
2. Dolin S, Dewar JP. Extramedullary plasmacytoma. *Am J Pathol*. 1956; 32(1):83-103.
3. Alexiou C, Kau RJ, Dietzfelbinger H, Kremer M, Spiess JC, Schratzenstaller B, Arnold W. Extramedullary plasmacytoma: Tumor occurrence and therapeutic concepts. *Cancer*. 1999;85(11):2305-14.
4. Talamo G, Cavallo F, Zangari M. Clinical and biological features of multiple myeloma involving the gastrointestinal system. *Haematologica*. 2006;91(7):964-7.
5. Sousos N, Vlachaki E, Anastasiadou K, Boura P, Venizelos I, Chatzimavroudis G, Katsinelos P. Diffuse gastric plasmacytoma involvement in multiple myeloma. *Endoscopy*. 2015;47(S1):E197-E197.
6. Lu C-H, Hsieh AT, Peng YJ, Yan JC. Multiple myeloma presenting as gastric polyposis. *Dig Dis Sci*. 2007;52(12):3340-2.