Images in GI Infection: Tuberculosis of Retroperitoneal Lymph Nodes Causing Gastric Outlet Obstruction

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A 24-year-old male patient presented with abdominal pain and recurrent vomiting for a week. The patient was asthenic with a body mass index of 20.1 kg/m^2. There was no evidence of generalized lymphadenopathy. On per-abdominal examination, a lump of around 5 cm was palpable in the right hypochondrium extending into the right lumbar region, which was not moving with respiration. There was no hepatosplenomegaly. A succussion splash was heard on auscultation. Upper gastrointestinal endoscopy revealed a grossly dilated stomach and first and second parts of the duodenum (D1 and D2) with luminal narrowing at D2-D3 junction. Biopsy revealed lymphoplasmacytic infiltration of the lamina propria. Computed tomography of the chest and abdomen was done that showed ill-defined hypodense lesion posterior to D2 and grossly distended stomach and D1 (►**Fig. 1A** and **1B**). Ultrasound-guided fine needle aspiration (FNA) from the mass showed predominant necrosis with a few granulomas in a background of mature lymphoid cells. Ziehl–Neelsen staining revealed the presence of acid-fast bacilli suggestive of tuberculosis (►**Fig. 1D** and **E**). Intraoperatively, there was a mass in the D2-D3 region with a grossly dilated stomach (►**Fig. 1C**), and no peritoneal or omental deposits. Isoperistaltic ante-colic gastrojejunostomy was done along with feeding jejunostomy. The postoperative course was uneventful, the patient was allowed orally by postoperative day (POD) 3 and was discharged on POD5. Following discharge, he was started on antitubercular therapy (ATT) for 6 months. Currently, at 2 year follow-up, the patient is doing fine and has no similar complaints.

This case is reported because of the unusual presentation with gastric outlet obstruction. Gastric outlet obstruction is usually a result of gastric cancer or peptic ulcer disease.[1] Tuberculosis can result in GOO due to the involvement of antro-pyloric region, duodenal tuberculosis, and rarely extrinsic compression by lymphadenopathy, as noted in the present case.[2]

Ethical Statement

Ethical approval was taken from the institute's ethics board. Written consent was obtained from the patient.

Author Contributions

A.C. - Preparation of manuscript, patient. Management. V.J. - Preparation of manuscript, data collection. H.B. - Patient management. R.K.-Patient management, cytological images. S.I. - Patient management, conceptualization, supervision.

Data Availability Statement

There is no data associated with this work.

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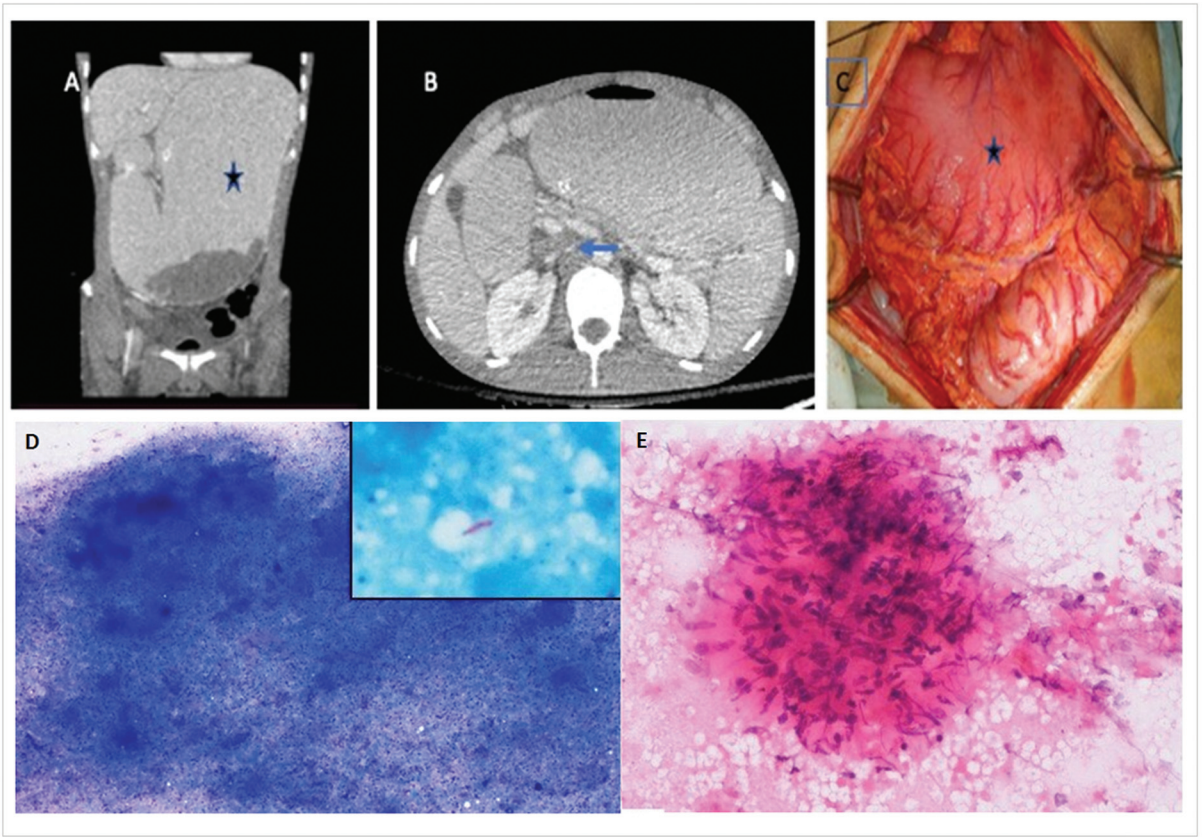

Fig. 1 (**A**) Coronal CT scan showing grossly dilated stomach (asterisk). (**B**) Axial CT scan image showing the retroperitoneal lymph node (arrow) causing extrinsic compression of the duodenum (D2-D3 junction). (**C**) Intra-operative image showing grossly dilated stomach (asterisk). (**D**) Ultrasound-guided fine needle aspiration cytology smear showing extensive caseous necrosis (inset shows acid fast bacillus) May Grünwald–Giemsa stain, Inset: Ziehl–Neelsen stain. (**E**) Epithelioid cell granuloma in hematoxylin and eosin stain.

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Conflict of Interest
None declared.

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