Received: 24 March 2018 | Revised: 14 July 2018 | Accepted: 6 August 2018

DOI: 10.1002/ccr3.1786

CLINICAL IMAGE

WILEY Clinical Case Reports Open Access

Gastroduodenal intussusception due to gastrointestinal stromal tumor

Utpal De | **Srijan Basu**

Department of Surgery, Bankura Sammilani Medical College, Bankura, West Bengal, India

Correspondence
Utpal De, Department of Surgery, Bankura Sammilani Medical College, Bankura, West Bengal, India.
Email: utpalde@vsnl.net

Key Clinical Message

Gastric GIST should be kept in mind in patients with gastric outlet obstruction.

KEYWORDS

GIST intussusception,

1 | QUIZ

A 42-year-old female presented with symptoms of upper abdominal pain and intermittent vomiting after meals for the past 6 months. She did not have any significant past history. She presented with clinical features of acute gastric outlet obstruction. Blood investigations showed anemia. Endoscopy (Figure 1) revealed a submucosal tumor from the anterior wall of stomach with central ulceration prolapsing into the duodenum. CT scan (Figure 2) demonstrated $8 \times 7 \times 4$ cm sized heterogeneously enhancing pedunculated polypoid mass attached to the antropyloric region, lying within the duodenum extending till its third part. Laparotomy was performed, and the mass was removed with a cuff of anterior wall of stomach with GIA stapler. Postoperative period was uneventful, what is the lesion in the resected specimen of stomach? (Figure 3).

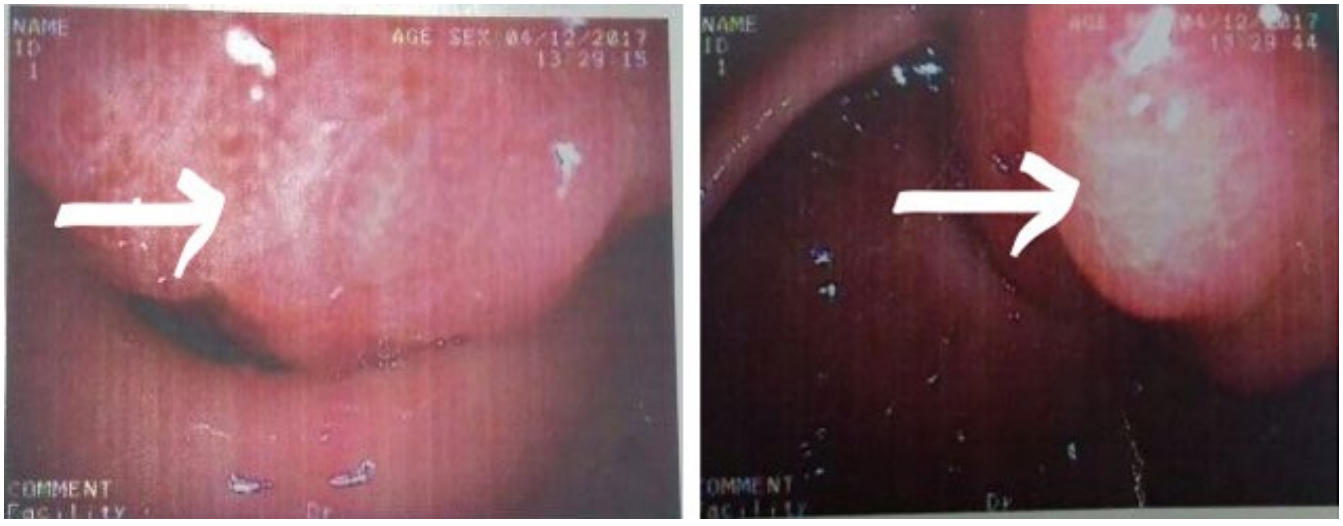

FIGURE 1 Endoscopy showing submucosal tumor in the antrum with mucosal ulceration (white arrowhead)

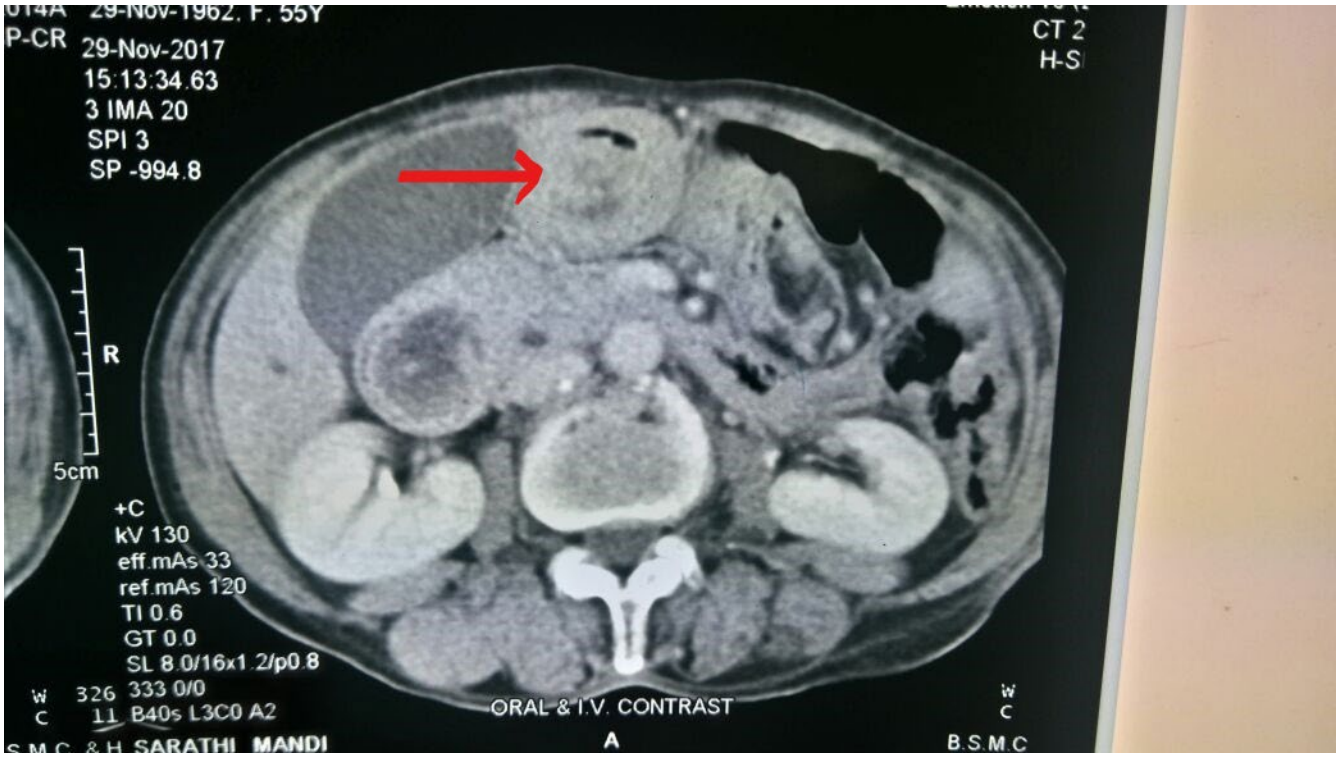

FIGURE 2 CT scan showing gastric tumor invaginating into second part of duodenum (red arrowhead)

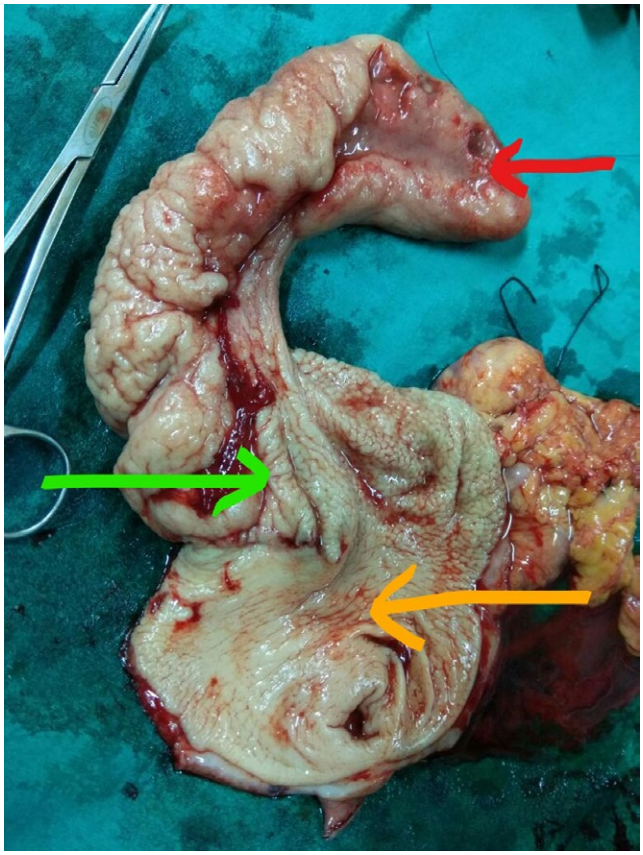

FIGURE 3 Resected specimen of GIST showing apex (red arrow), base (green arrow), and part of cuff of stomach (yellow arrow)

2 | ANSWER

Gastroduodenal intussusception (10%)[1,2] causing acute gastric outlet obstruction due to pedunculated gastric gastrointestinal stromal tumor (GIST) is rare. GIST (mesenchymal tumor) is pathologically defined by positive immunostaining for c-kit proto-oncogene—CD117 (95%) and CD34 (60%-70%).[2] Ulceration of the apical mucosa results in bleeding (50%).[2] Endoscopy and CT scan are diagnostic. Treatment for localized GIST is complete surgical resection. Fletcher's risk stratification indices include tumor size, mitotic index, nonradical resection (R1), and tumor rupture.[1,2] Postoperative chemotherapy improves relapse-free survival, but overall survival remains unchanged.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTION

UD and SB: conceived of the presented idea. UD: encouraged SB to investigate and supervised the findings of this work. All authors: discussed the results and contributed to the final manuscript.

ORCID

Utpal De http://orcid.org/0000-0002-6160-3417

REFERENCES

1. Yamamoto H, Oda Y. Pathology and genetics of GIST. *Pathol Int*. 2015;65:9-18.
2. Serrano C, George S. Recent advances in the treatment of gastrointestinal stromal tumors. *Ther Adv Med Oncol*. 2014;6:115-127.

How to cite this article: De U, Basu S. Gastroduodenal intussusception due to gastrointestinal stromal tumor. *Clin Case Rep*. 2018;6:2276–2278. https://doi.org/10.1002/ccr3.1786