

Metastatic gastrointestinal stromal tumors mimicking gastrointestinal polyposis

A 70-year-old man was admitted to our hospital because of hematemesis. Esophagogastroduodenoscopy showed more than 10 gastric polypoid lesions (● Fig. 1 a). The smaller lesions were sessile, clearly demarcated, and had whitish erosions on the surface (● Fig. 1 b). The larger lesions were sub-pedunculated, and indigo carmine staining revealed a constricted base and elongated gastric pits on the surface (● Fig. 1 c). These endoscopic appearances suggested an epithelial origin and a diagnosis of hyperplastic polyps. Colonoscopy also demonstrated multiple polypoid lesions, which resembled the lesions in the stomach (● Fig. 1 d). However, histological examination of the biopsy specimens obtained from the gastric and colonic lesions showed an unexpected pathological finding: there was monotypic proliferation of spindle cells, which were KIT-positive on immunostaining (● Fig. 2). This staining pattern suggested gastrointestinal stromal tumor (GIST). Computed tomography revealed multiple gastrointestinal masses, and the largest mass in the small intestine seemed to have caused invagination and occlusive ileus (● Fig. 3). The histological findings of a surgically removed small intestinal tumor were indistinguishable from those of the lesions in the stomach and colon (not shown). Therefore, we made a diagnosis of small-intestinal gastrointestinal stromal tumor (GIST) that had metastasized and formed pedunculated polypoid lesions in the stomach and colon. The patient was given systemic chemotherapy consisting of imatinib mesylate and he survived for 1 year after the diagnosis. GIST commonly metastasizes to the liver and abdominal cavity [1] and rarely to the lungs, bones, soft tissues, and skin [2]. To the best of our knowledge, this is the first report of a patient in whom GIST gave rise to multiple metastases within the digestive tract. It is thought that GIST originates in the interstitial cells of Cajal

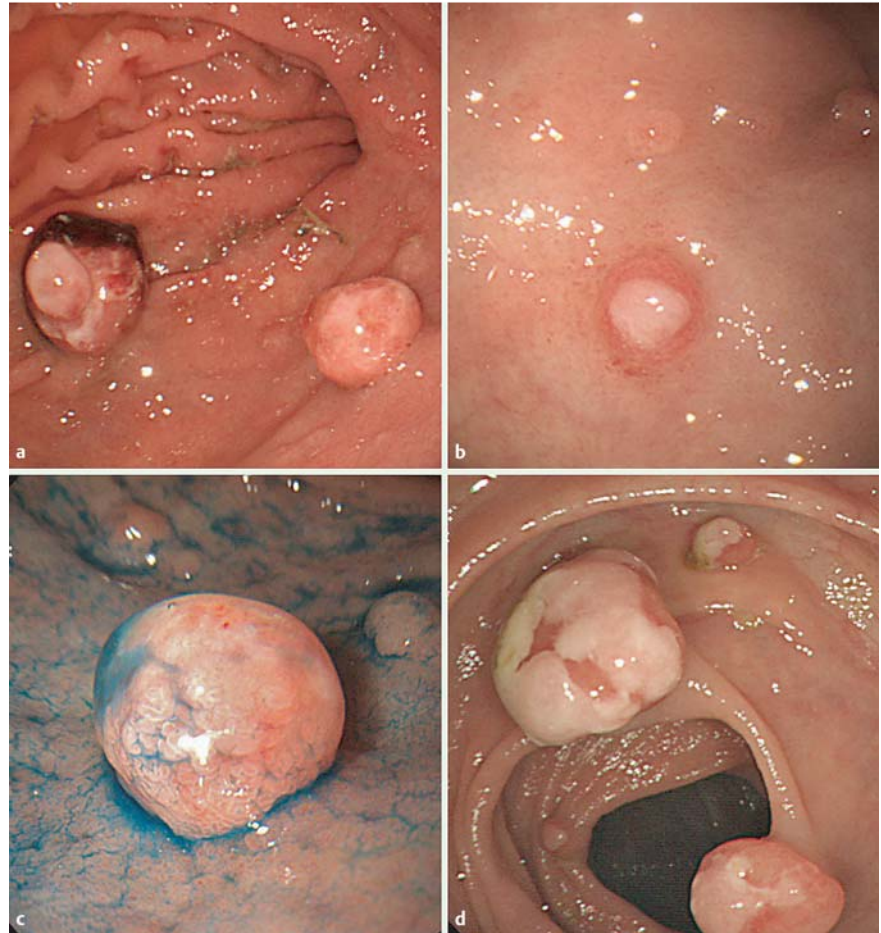


Fig. 1 Endoscopic views of the stomach. **a** More than 10 polypoid lesions were located between the fornix and the upper body of the stomach; blood was oozing from one of the lesions. **b** The smaller lesions were sessile and the top surface was covered with whitish erosions. **c** The larger lesions were sub-pedunculated, and an indigo carmine test revealed a constricted base and elongated gastric pits on the surface. **d** Colonoscopy also demonstrated multiple pedunculated, polypoid colonic lesions that resembled those in the stomach.

or their precursors [3] and therefore often manifests as solid, subserosal, intramural, and, less commonly, intraluminal pedunculated masses. It should be noted that metastatic GIST can form multiple, pedunculated polypoid configurations mimicking gastrointestinal “polyposis”.

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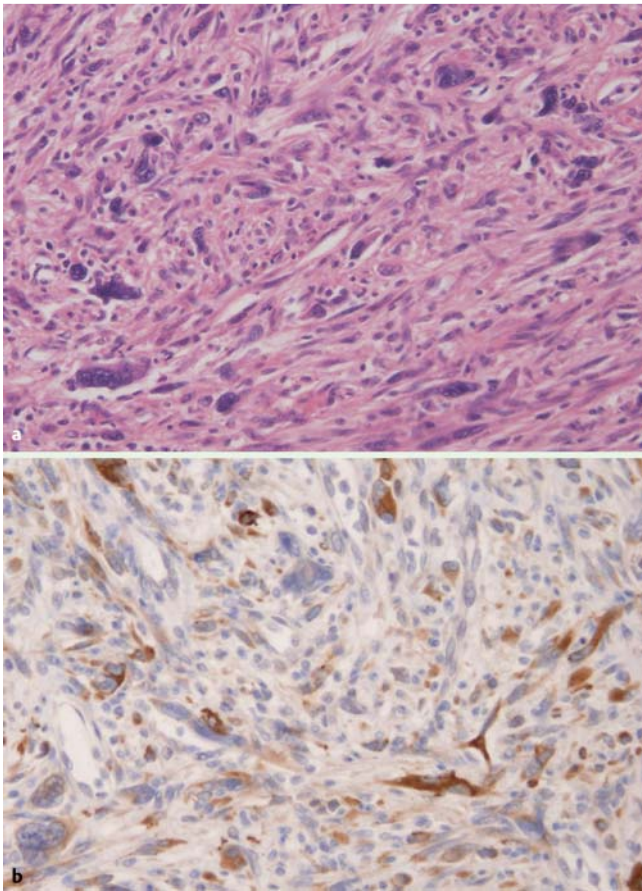


Fig. 2 **a** Hematoxylin and eosin (H&E)-stained sections demonstrated spindle cells with round to irregular nuclei proliferating rapidly in follicular and interlacing patterns (magnification $\times 200$). **b** Immunohistochemical staining showed spindle cells positive for KIT (magnification $\times 200$).

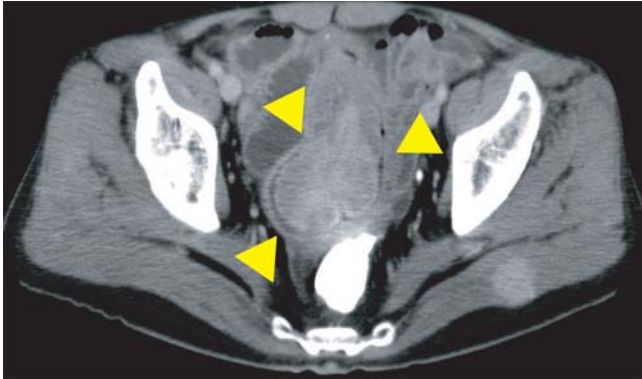


Fig. 3 Computed tomography (CT) scan showed widespread multiple masses; the largest mass in the small intestine appeared to be associated with invagination and occlusive ileus (arrowheads).

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