



Chronic recurrent emesis in a geriatric patient with jejunal cavernous hemangioma misdiagnosed as diabetic gastroparesis

To the Editor,

Hemangiomas of the small bowel are rare, accounting for only 7–10% of all benign tumors of the small intestine (1). A 60-year-old female presented to our hospital with chronic refractory emesis for over a decade. She usually began vomiting after food ingestion 2 h later. Repeated endoscopic analyses detected no marked abnormality, although abdominal plain X-ray identified signs of gastric retention. She was presumably diagnosed with diabetic gastroparesis because of her pre-existing diabetic conditions.

Upon admission, the gastrointestinal (GI) contrast radiography indicated the stenosed lumens of the duodenal ascending part and distal jejunum, and computed tomography (CT) showed that the walls of those regions became thickened and rigid, and multiple shadows of calcification were visible (Figure 1). Then, double-balloon enteroscopy (DBE) detected that the intestinal mucosae became extensively hypertrophic and edematous in the duodenal ascending part (Figure 2). During laparotomy, a cavernous hemangioma confirmed by biopsy was detected at the jejunal segment, and partial enterectomy with primary anastomosis was performed (Figure 3-5).

Intestinal hemangioma has been reported to manifest mainly as GI bleeding and occasionally as intestinal obstruction, intussusception, or perforation (2). Chronic emesis is rarely reported as the primary symptom of intestinal hemangioma, particularly in elderly patients complicated with chronic metabolic diseases in this report. It may be the high pressure caused by bowel obstruction due to the annular intestinal lumens stenosis of diffuse cavernous hemangioma developed vomiting.

The definitive diagnosis of preoperative intestinal hemangioma is unlikely (2), but hemangioma should be



Figure 1. Computed tomography scan revealed that the walls of the proximal jejunum became thickened and rigid, and multiple shadows of calcification were visible on proximal jejunal walls.



Figure 2. Double-balloon enteroscopy revealed that the intestinal mucosae circling the lumen became hypertrophic, resulting in an overtly constricted lumen. Meanwhile, the mucosae were congested, edematous, and dark red in color, which were covered by white necrotic tissues.

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Received: March 08, 2012 **Accepted:** June 28, 2012

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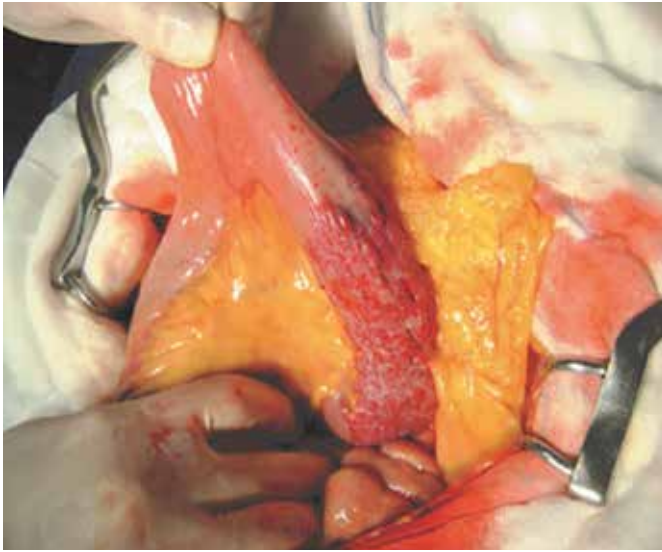


Figure 3. Explorative laparotomy identified the generally normal small intestine, except for an isolated and well-vascularized tumorous lesion located at the proximal jejunum.

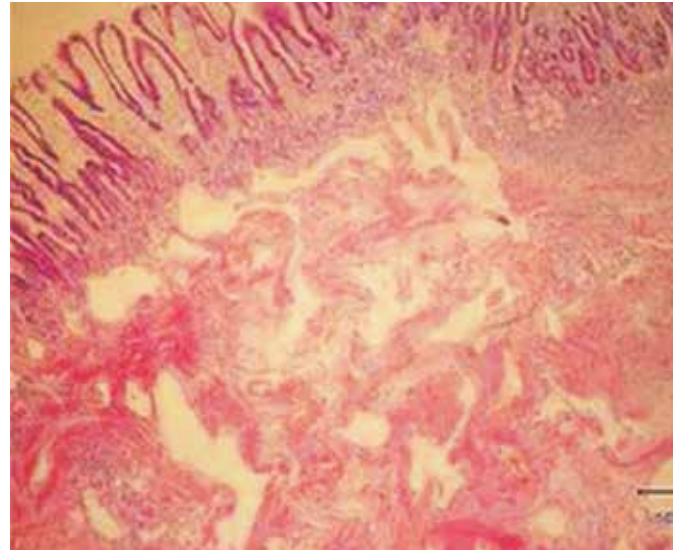


Figure 5. Microscopic examination revealed malformed blood-filled sinuses of various sizes (hematoxylin-eosin, 40x). Scale bar=50 μ m.



Figure 4. Gross pathological examination revealed thickened and hyperaemic intestinal walls on axial section. Scale in centimeters.

considered in case of GI bleeding of obscure origin (3). Non-invasive diagnostic approaches such as CT, barium contrast study, and DBE should be applied to identify small intestinal hemangioma (4,5), avoiding the potential of unnecessary and highly risky emergency surgical intervention. Manometry and gastric emptying scan should be considered when diabetic gastroparesis was suspected, and the symptoms should be improved by the well-controlled serum glucose level; therefore, it cannot be misdiagnosed.

Among the various treatment modalities of hemangiomas that include medical treatment, interventional embolization techniques, endoscopic coagulation, and surgical procedures, complete surgical resection is the best treatment for large or diffuse cavernous hemangioma (6). Laparoscopic excision is

feasible and has the advantages of less pain and quicker recovery following surgery (7). In our case, we adopted emergency surgical intervention because of the excessive hematemesis by biopsy. It should be considered that intestinal hemangioma is prone to excessive hemorrhage from mechanical contact and contraindicated to biopsy.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of The First Hospital of Jilin University and was performed according to the Declaration of Helsinki.

Informed Consent: Written informed consent was obtained from patient who participated in this case.

Peer-review: Externally peer-reviewed.

Author contributions: Concept - X.W.M.; Design - L.Y.L.; Supervision - X.W.M.; Resource - X.W.M., X.S., Q.W.; Materials - X.W.M., X.S., Q.W.; Data Collection &/or Processing - L.Y.L.; Analysis &/or Interpretation - L.Y.L.; Literature Search - L.Y.L., Y.J.S.; Writing - L.Y.L.; Critical Reviews - X.W.M.

Acknowledgements: All authors and the patient made substantial contributions to the intellectual content and presentation of the manuscript.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study has received no financial support.

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