Turk J Gastroenterol *2016; 27: 470-1*

A nontraumatic intramural duodenal hematoma causing gastric outlet obstruction

To the Editor,

A 62-year-old woman with no significant medical history presented with abdominal pain and frequent vomiting for the previous 2 days. She denied any history of trauma or medication. Upon examination, she was found to have dehydration, abdominal distention around epigastrium, and sinus tachycardia. Laboratory tests showed normal blood count, azotemia, and hyponatremia, which indicated acute kidney injury (AKI) due to severe dehydration. An upright abdominal X-ray showed niveau in the stomach (Figure 1a), and computed tomography demonstrated a hyperdense mass lesion around the pancreatic head (Figure 1b). Her symptoms were relieved after nasogastric tube insertion, and renal function returned to normal with fluid resuscitation. After 2 days, Gastrografin® (Bayer New Zealand Limited; Auckland, New Zealand) injection through the endoscope clearly showed severe stenotic change in the duodenum (Figure 1c) and upper endoscopy allowed clear visualization of severe stenotic changes of the second part of the duodenum and swelling of the mucosa (Figure 2a). Endoscopic ultrasonography showed a hypoechoic heterogeneous mass lesion located in the subserosa (Figure 2b). These findings led to a diagnosis of intramural duodenal hematoma (IDH). She was able to resume oral feeding after 7 days. Various blood tests revealed no coagulation disorders.

Intramural duodenal hematoma usually occurs in the second and third segments of the duodenum because they have a relatively fixed position and rich submucosal vascular supply (1). Non-traumatic IDH is rare and is associated with anticoagulation/antiplatelet therapy, coagulation disorders, or endoscopic hemostasis (2). There have been a few reports of non-traumatic IDH causing AKI, although it is plausible that IDH would cause severe dehydration due to gastric outlet obstruction.

Rintaro Hashimoto, Akimichi Chonan

Department of Gastroenterology, Sendai Kousei Hospital, Miyagi, Japan

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Sendai Kousei Hospital.

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

Peer-review: Externally peer-reviewed.

Author Contributions: Supervision - R.H.; Materials - R.H.; Data Collection and/or Processing - R.H.; Analysis and/or Interpretation - R.H.; Literature Review - R.H.; Writer - R.H.; Critical Review A.C.

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.

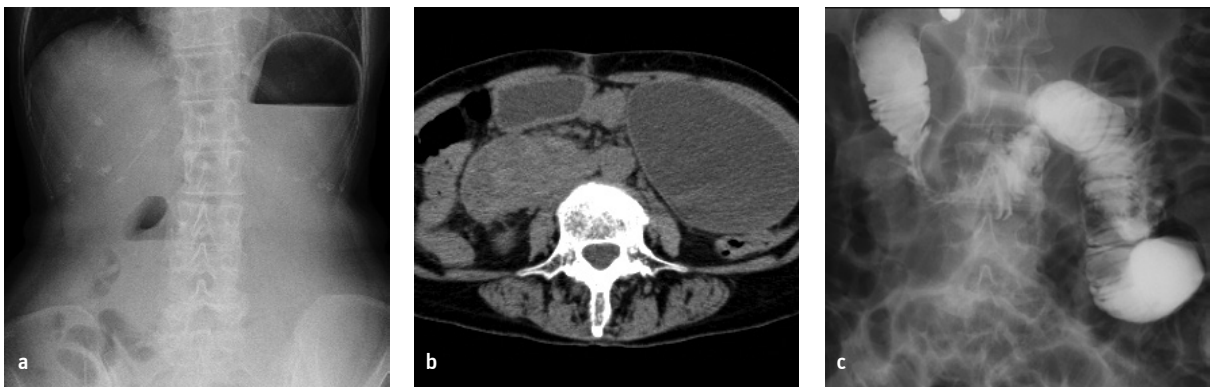

Figure 1. a-c. Abdominal radiographic findings. An upright abdominal X-ray showed small gastric bubble and niveau formation (a), computed tomography showed a hyperdense mass lesion around the pancreatic head (b), an upper gastrointestinal series revealed stenotic change of the duodenum (c)

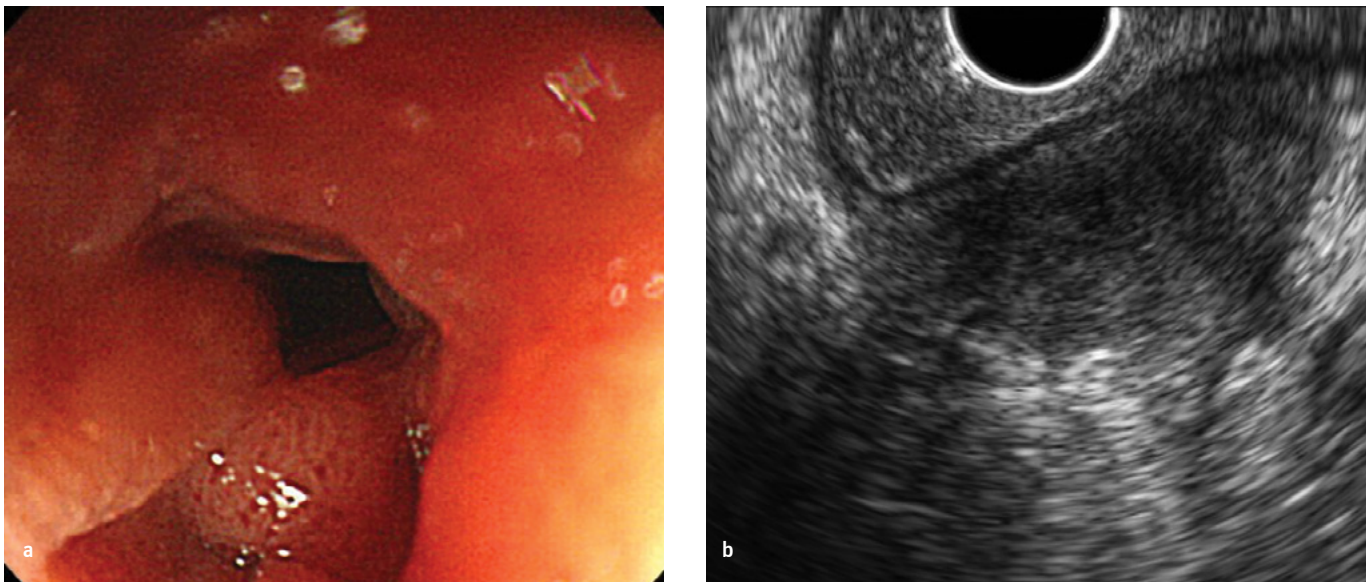

Figure 2. a, b. Endoscopic images. Upper endoscopy showed swelling and redness of the mucosa (a), endoscopic ultrasonography showed a homogeneous low echoic lesion located in the subserosal layer (b)

REFERENCES

1. Jones WR, Hardin WJ, Davis JT, et al. Intramural hematoma of the duodenum: a review of the literature and case report. Ann Surg 1971; 173: 534-44. [CrossRef]
2. Veloso N, Amaro P, Ferreira M, Romãozinho JM, Sofia C. Acute pancreatitis associated with a nontraumatic, intramural duodenal hematoma. Endoscopy. 2013; 45(Suppl 2) UCTN: E51-52.

Address for Correspondence: Rintaro Hashimoto
E-mail: rinhashimoto@gmail.com
Received: June 6, 2016 **Accepted:** June 20, 2016