Three Times Repeated Portal Venous Gas after Meals

Takamasa Kobayashi¹, Atsunori Tsuchiya¹, Takeshi Suda² and Shuji Terai¹

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Picture 1.

Picture 2.

A 62-year-old man was admitted due to long-shallow gastric ulcers (Picture 1). He was on various medications including warfarin. After admission, during which warfarin was stopped, he had a mild cerebral infarction, thus a heparin infusion was started (12,000 U/day). On day 20 he resumed meals and had short-term periumbilical pain. Computed tomography revealed portal venous gas (PVG) that disappeared the next day without intestinal ischemic change,

and severe arteriosclerotic stenoses at both trunks of the superior- and inferior-mesenteric artery (SMA and IMA) (Picture 2). While the heparin dose was increased to 18,000 U/day, the same episode occurred two more times (Picture 3).

Since capsule endoscopy after the third PVG showed multiple ischemic areas in the distal jejunum (Picture 4; upper-panels), oral administration of clopidogrel and beraprost so-

¹Department of Gastroenterology and Hepatology, Graduate School of Medical and Dental Science, Niigata University, Japan and ²Department of Gastroenterology and Hepatology, Uonuma Institute of Community Medicine, Niigata Medical and Dental Hospital, Japan

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Correspondence to Dr. Atsunori Tsuchiya, atsunori@med.niigata-u.ac.jp

Picture 3.

Capsule endoscopy

Picture 4.

dium was initiated, and the attack subsequently disappeared for more than one year (Picture 4; lower-panels). These clinical findings suggested that relative ischemia of the intestine after meals caused erosions/ulcers from where intestinal gas flowed into the portal vein.

This case clearly showed a reversible “chronic mesenteric

ischemia-ischemic enteritis-PVG” sequence (1, 2). Anti-platelet and anti-coagulant therapies have a dual nature. While these drugs can lead to a risk of bleeding from damaged erosions/ulcers, these drugs can also prevent/improve this mucosal damage.

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References

1. Keese M, Schmitz-Rixen T, Schmandra T. Chronic mesenteric ischemia: time to remember open revascularization. *World J Gastroenterol* **19**: 1333-1337, 2013.
2. Rankin I, Sheth H. Hepatic portal venous gas: comparison of two cases. *Case Rep Surg* **2013**: 637951, 2013.

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