Hematoperitoneum after small-bowel spiral enteroscopy

Fig. 1 Axial computed tomography (CT) of abdomen and pelvis in a 62-year-old woman with a 3-day history of melena. Hyperdense fluid adjacent to the liver (red arrows) can be seen. There is no free air.

Advances in endoscopy including spiral enteroscopy [1] have transformed the management of small-bowel diseases, and published data have demonstrated this to be a safe procedure [2–8]. We report the first case, related to spiral enteroscopy, of hematoperitoneum in a 62-year-old woman.

Our patient presented to the emergency room with a 3-day history of melena. Her past medical history was significant for obscure gastrointestinal bleeding, and left nephrectomy. Given the previous extensive negative workup for obscure gastrointestinal bleeding, spiral enteroscopy was carried out. This showed nonbleeding angiectasias in the proximal and mid-jejunum, which were treated with argon plasma coagulation. Within a few hours the patient developed severe abdominal pain that radiated to her shoulders, and was noted to be tachycardic and hypotensive. Abdominal and pelvic computed tomography (CT) showed fluid in the abdomen consistent with hematoperitoneum (● Fig. 1). The patient was transferred to the intensive care unit and managed conservatively with fluids and blood transfusion. She improved clinically and was discharged in a stable condition.

As with many patients undergoing deep enteroscopy, this group has had previous intra-abdominal procedures, which was

also the case in our patient, who had undergone left nephrectomy. Deep enteroscopy can stretch or apply torque to adhesions and the mesentery with the potential of disruption of blood vessels. This puts any patient undergoing deep enteroscopy at risk from the inadvertent tearing of adhesions. The fact that thousands of these procedures have been done without major complications, including hematoperitoneum [4–8], suggests that fortunately this is very rare. Akerman et al. reported the rate of severe adverse events with spiral enteroscopy to be only 0.3% [9]. It can be concluded from the published literature that deep enteroscopy is a safe and effective technology with a low rate of major complications, however, clinicians should remain aware that these events can occur and are not immediately obvious.

Endoscopy_UCTN_Code_CPL_1AI_2AD

Competing interests: None

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DOI <http://dx.doi.org/10.1055/s-0033-1344585>
Endoscopy 2013; 45: E337
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

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