

Impacted bone fragment in a small-bowel diverticulum: an extremely rare cause of obscure gastrointestinal bleeding

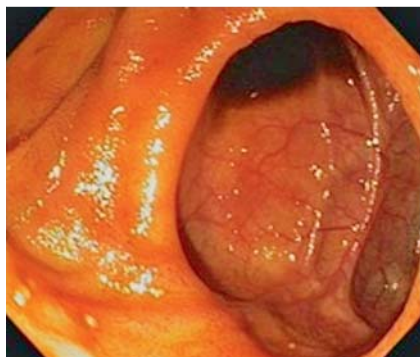


Fig. 1 Large-mouthed small-bowel diverticulum.



Fig. 2 Evidence of bleeding in a small-bowel diverticulum.



Fig. 3 a, b Small-bowel diverticulum with impacted bone fragment.

Obscure gastrointestinal tract bleeding (OGIB) is a common and challenging issue [1]. Here we present an extremely rare case of overt OGIB secondary to impacted bone fragment within a small-bowel diverticulum.

An 88-year-old man presented with hypotension and a 2-day history of maroon-colored stools. Initial hemoglobin concentration was 7.7 g/dL. Urgent upper endoscopy showed a large duodenal diverticulum with no signs of bleeding. Colonoscopy was also unremarkable. Capsule small-bowel study was attempted, but the capsule was retained in the duodenal diverticulum, requiring endoscopic retrieval. Mesenteric angiography was negative. Delayed images on Tc-99m-labeled red blood cell scan showed activity in the small bowel. Antegrade and retrograde

single-balloon enteroscopy to the distal jejunum and proximal ileum showed large-mouthed diverticula but no signs of active bleeding. Intraoperative enteroscopy showed a segment in the mid-small bowel with multiple large-mouthed diverticula, including one diverticulum with a blood clot suggestive of recent bleeding (Fig. 1, Fig. 2). Segmental resection of this small-bowel segment containing the bleeding diverticulum and surrounding large-mouthed diverticula (approx. 60 cm) was performed. Postoperatively, the patient's hemoglobin levels remained stable with no further episodes of gastrointestinal bleeding. Examination of the resected small-bowel specimen showed large diverticula with a single diverticulum having an impacted 3-cm bone fragment with hemorrhagic

changes in the surrounding mucosa (Fig. 3).

Most of the cases of OGIB are due to small-bowel pathology. Identifying and treating the etiology of OGIB can be challenging [2]. There are only few case reports of foreign body ingestion causing OGIB. Our case is the first report of a bone fragment causing OGIB [3,4].

Endoscopy_UCTN_Code_CCL_1AC_2AH

Competing interests: None

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DOI <http://dx.doi.org/10.1055/s-0034-1365430>
Endoscopy 2014; 46: E262
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

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