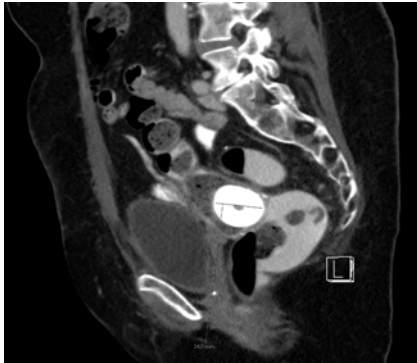


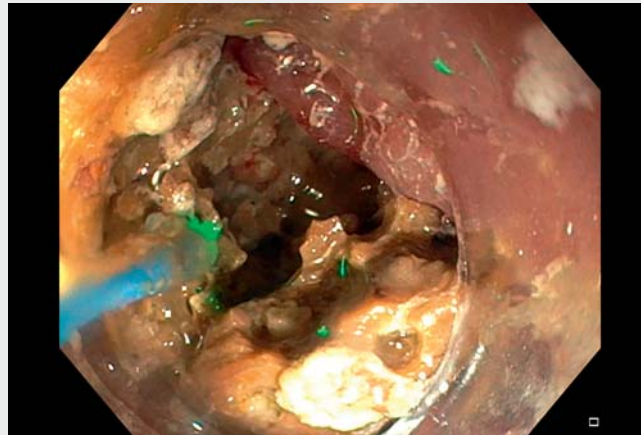
Laser lithotripsy for the treatment of a giant fecalith obstructing a colorectal anastomosis

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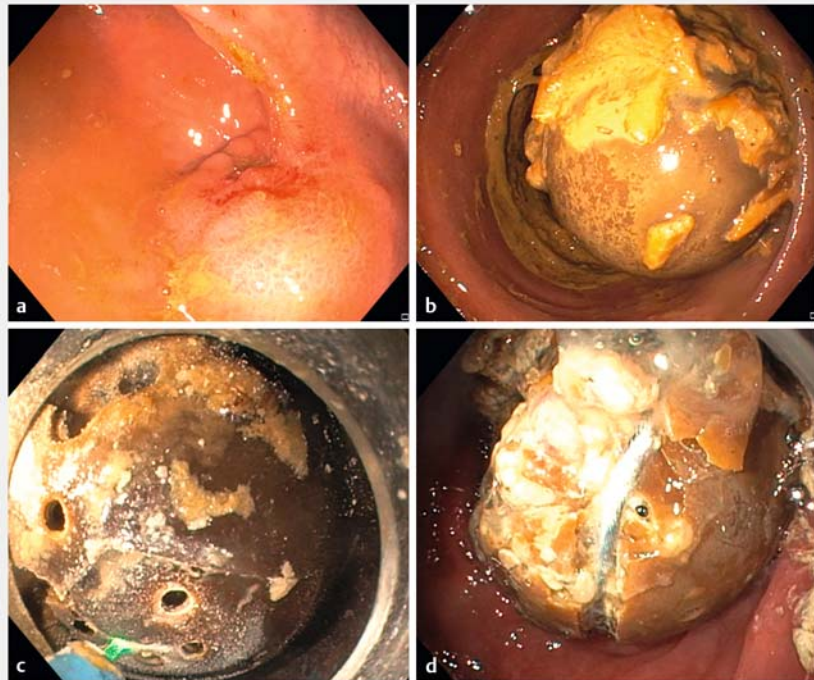


► **Fig. 1** Computed tomography scan showing a 36-mm dense rounded lesion in the colon above a stenotic colorectal anastomosis in a patient who had undergone surgery for a sigmoid cancer 27 years previously.

A 77-year-old woman who had undergone surgical resection of a sigmoid cancer 27 years previously was evaluated for symptoms suggestive of bowel obstruction. A computed tomography (CT) scan showed a 36-mm dense rounded mass in the colon on the oral side of a stenotic colorectal anastomosis (► **Fig. 1**; ► **Video 1**). At colonoscopy, the colorectal anastomosis, which had a 6-mm opening (► **Fig. 2a**), was dilated before the mass could be seen (► **Fig. 2b**). Lithotripsy using Holmium laser (Dornier) was started (► **Fig. 2c**) and multiple cavities were made in an attempt to weaken and divide the stone prior to mechanical lithotripsy (► **Fig. 2d**). During attempts to fragment the stone, nine mechanical lithotripters (Olympus) were damaged and this was followed by failure of the emergency lithotripter handle when trying to resolve the problem. Damaged wires impacted in the fecalith had to be divided by laser to separate the lithotripter from the stone. The stone was finally attenuated sufficiently to be fragmented and, after the anastomosis had been dilated to 18 mm, the larger segments were eventually cleared.



► **Video 1** A giant fecalith above a stenotic colorectal anastomosis was treated by laser lithotripsy, before mechanical lithotripsy could be successfully applied.



► **Fig. 2** Endoscopic images showing: **a** the stenotic colorectal anastomosis that first needed to be dilated; **b** the large stone that could then be visualized; **c** the appearance after tedious Holmium laser lithotripsy had been applied to attenuate the fecalith; **d** the fragmented stone after successful mechanical lithotripsy.

We considered alternative pathogenesises of the lesion. Fecaliths may form in a Meckel's diverticulum and cause small-bowel obstruction [1]; however, there was no indication of a Meckel's diverticulum on the CT scan. The possibility of giant bile stone migration was also considered, but the patient had a normal gallbladder on CT and no symptoms of cholecystitis, bilioenteric fistula formation, or bile stone migration [2]. We therefore believe the stone was a fecalith that formed above a stenotic colorectal anastomosis and believe this is the first report of a fecalith above an intestinal anastomosis being treated by laser lithotripsy, although a cholangioscopy-guided laser has been used to treat a fecalith in the appendix [3]. Successful endoscopic treatment over four sessions spared our patient the necessity of additional colon surgery, with its associated risk of complications in an elderly patient. This treatment option should be considered if similar cases are encountered.

Endoscopy_UCTN_Code_TTT_1AQ_2AF

Competing interests

The authors declare that they have no conflict of interest.

The authors

Reidar Fossmark^{1,2}, Peter Lefstad Dalsbø², Kjell Morten Rokseth³, Øyvind Hauso^{1,2}

- 1 Department of Clinical and Molecular Medicine, Faculty of Medicine, Norwegian University of Science and Technology (NTNU), Trondheim, Norway
- 2 Department of Gastroenterology, St Olav's Hospital, Trondheim University Hospital, Trondheim, Norway
- 3 Department of Radiology, St Olav's Hospital, Trondheim University Hospital, Trondheim, Norway

Corresponding author

Reidar Fossmark, MD, PhD

Department of Gastroenterology and Hepatology, St Olav's Hospital – Trondheim University Hospital, Prinsesse Kristinas gate 1, 7030 Trondheim, Norway
reidar.fossmark@ntnu.no

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Endoscopy 2023; 55: E568–E569

DOI 10.1055/a-2040-3868

ISSN 0013-726X

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