

Carcinoma of left colon presenting as mechanical obstruction in a patient with osteogenesis imperfecta type III

G. Augustin · Z. Jelincic · M. Majerovic · L. Stefancic

Received: 27 July 2006 / Submitted in revised form: 5 October 2006 / Accepted: 8 October 2006 / Published online: 14 December 2006
© SSIEM and Springer 2006

A 44-year-old premenopausal white woman with osteogenesis imperfecta (OI) type III was admitted for signs of colon obstruction (Fig. 1). Plain abdominal radiographs revealed dilated loops of colon and small intestine. Single-contrast barium enema (Fig. 2) delineated the anal canal and distal rectum with contrast stopping at the pelvic inlet. On operation, dilated colon and rectum were identified up to the peritoneal fold with significant pelvic stenosis as a cause of obstruction. Further examination revealed a mass on the splenic flexure of the colon (Fig. 3). The Hartmann procedure (resection of the colon containing the tumour with formation of a colostomy) was performed. Intraoperative bleeding was prominent and could have been due to underlying connective-tissue changes rather than a primary platelet disorder (Hathaway and Solomons 1972). Wound healing was normal but stomal prolapse of 40 cm was observed. It was unlikely to be attributable to surgical error because an experienced colorectal surgeon undertook the initial operation. Prolapse could have been due to loss of tensile strength of the connective tissue. Scott and Stris reported that surgical scars in OI individuals tend to stretch under traction and are apparently weaker than those of normal individuals segment was



Fig. 1 Abdominal distension in a 44-year-old woman with colon obstruction and osteogenesis imperfecta type III

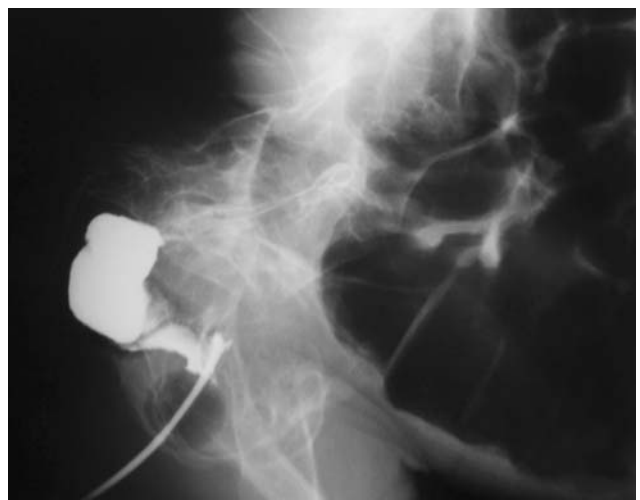


Fig. 2 Single-contrast barium enema shows the Foley catheter and contrast delineating the anal canal and distal rectum with the blockage of contrast

Communicating editor: Rodney Pollitt

Competing interests: None declared

G. Augustin (✉) · Z. Jelincic · M. Majerovic
Department of Surgery, Division of Abdominal Surgery,
University Hospital Center, Zagreb, Croatia
e-mail: gaugustin@inet.hr

L. Stefancic
Department of Anesthesiology, University Hospital Center
Zagreb, Croatia



Fig. 3 Photograph showing the obstructing lesion of the splenic flexure of the colon as a cause of large-bowel obstruction. Note that the colonic segment distal to this lesion has a similar diameter to the colon proximal to this lesion, which is a result of pelvic stenosis at the level of the rectum

resected and (Scott and Stris 1953). The prolapsed a new stoma was created. This is the first known case of OI with mechanical obstruction within the colon itself. This case emphasizes that obstruction in patients with OI is almost always due to progressive pelvic stenosis but colorectal evaluation is necessary because of potential underlying malignant disease.

References

- Hathaway WE, Solomons CC (1972) Platelet function and pyrophosphates in osteogenesis imperfecta. *Blood* **39**: 500–509.
- Scott D, Stris G (1953) Osteogenesis imperfecta tarda: a study of 3 families with special reference to scar formation. *Acta Med Scand* **145**: 237–240.