Sigmoid–sigmoid colon fistula caused by diverticulitis

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To the Editor: Diverticular disease is common worldwide and the incidence of this disease increases with aging. Complicated diverticulitis is serious and includes abscess, fistula, obstruction, and peritonitis. Eventually, surgical treatment is recommended to the patients with symptomatic complications. Among these, colocolic fistula caused by diverticulitis is rare findings and especially, sigmoid–sigmoid fistula is an extremely rare complication. The present report describes a case of sigmoid–sigmoid colon fistula caused by diverticulitis. The results of this case may help physicians to recognize that multidisciplinary management and surgery are needed for the treatment of complicated diverticulitis with fistula.

A 71-year-old woman with hypertension presented with intermittent abdominal pain in her left lower quadrant since a year ago and worsening of the condition for several days. Physical examination revealed abdominal tenderness and was otherwise unremarkable. Abdominal pelvic computed tomography (CT) showed a suspicious fistula between the proximal and distal sigmoid colon [Figure 1A]. Colonoscopy examination revealed a small fistula in the proximal sigmoid colon beside a small diverticulum. Twinkling points on the shaft of colonoscope could be seen through the fistula. The wire could not be inserted anymore and was twisted out because of the shaft of colonoscope in the distal sigmoid colon [Figure 1B]. Subsequently, the patient underwent enema with meglumine diatrizoate, which revealed a connection between the proximal and distal sigmoid colon without evidence of leakage [Figure 1C]. Sigmoid–sigmoid colon fistula caused by diverticulitis was finally diagnosed. We consulted with the other department, including the department of general surgery for multidisciplinary management. Although the standard treatment for complicated diverticulitis with fistula should be surgery, she had conservative treatment, such as bowel rest, intravenous fluids, and intravenous antibiotics because of the rejection of surgical treatment. Unfortunately, she was discharged from the hospital and eventually died of complicated diverticulitis a few months later.

Diverticular formation and the pathogenesis of diverticular disease are multifactorial and still unclear. Although complicated diverticulitis is a well-studied entity, it may occasionally present in an unusual way. Fistula is one among the complications of diverticulitis, which most commonly occurs as colovesical fistula, followed by colovaginal fistula. Colocolic fistula is rare findings, accounting for about 2%.[1]

The management of diverticular disease tends to be individualized by patient basis. Multidisciplinary management of complicated diverticulitis is currently the best practice strategy.[2] However, the standard treatment for complicated diverticulitis with fistula is surgical treatment.[3,4] Although CT is recommended as the first diagnostic modality in diverticulitis, complicated diverticulitis with fistula may be unclear. Therefore, physicians should consider the complication of diverticulitis when colonoscopy examination shows fistula in the sigmoid colon. Although rare, it should be kept in mind that multiple fistulas can be either internal or external. In the present case, the patient rejected surgical treatment and eventually died of complicated diverticulitis and sepsis a few months later. Therefore, physicians should strongly recommend multidisciplinary management and surgical treatment for complicated diverticulitis with fistula.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient and her family understand that her name and initials will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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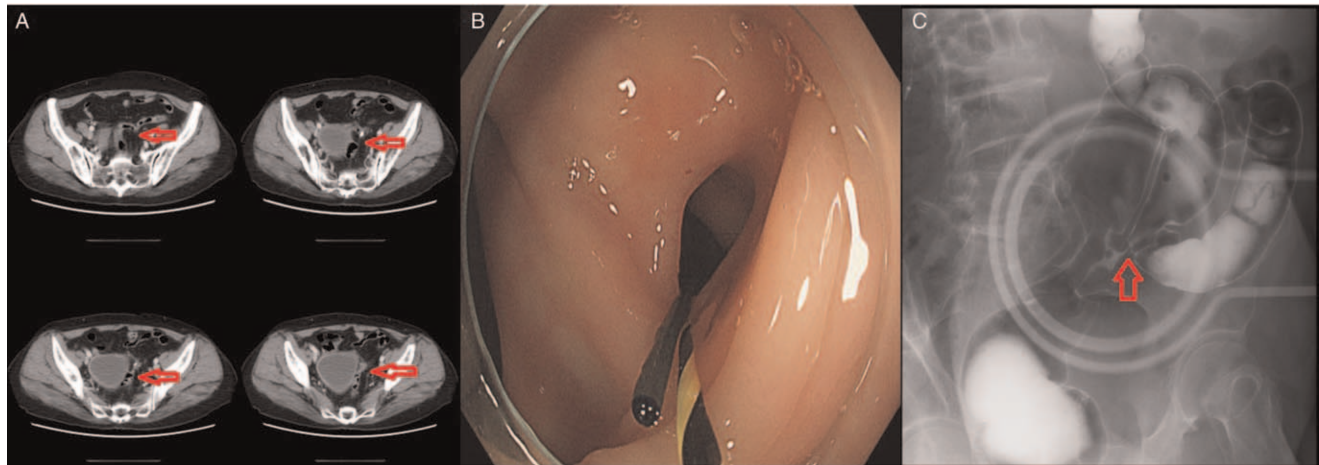

Figure 1: (A) Series of abdominal pelvic computed tomographic findings. The suspicious fistula was noted between the proximal and distal sigmoid colon in the image with axial view (arrows), but not clear with the coronal view (not shown). (B) Colonoscopy examination revealed fistula was noted in proximal sigmoid colon. A small diverticulum was located beside a fistula. Twinkling points on the shaft of the colonoscope were noted through the fistula. A wire could not be advanced. (C) Barium enema study showing fistula between the proximal and distal sigmoid colon (arrow).

Conflicts of interest

None.

References

1. Strati TM, Sapalidis K, Koimtzis GD, Pavlidis E, Atmatzidis S, Liavas L, *et al*. Sigmoido-cecal fistula: a rare case of complicated recurrent diverticulitis and a review of the literature. Am J Case Rep 2018;19:1386–1392. doi: 10.12659/AJCR.911790.
2. Lambrichts DPV, Birindelli A, Tonini V, Cirocchi R, Cervellera M, Lange JF, *et al*. The multidisciplinary management of acute complicated diverticulitis. Inflamm Intest Dis 2018;3:80–90. doi: 10.1159/000486677.
3. Schultz JK, Azhar N, Binda GA, Barbara G, Biondo S, Boermeester MA, *et al*. European society of coloproctology: guidelines for the management of diverticular disease of the colon. Colorectal Dis 2020;22 Suppl 2:5–28. doi: 10.1111/codi.15140.
4. Cirocchi R, Fearnhead N, Vettoretto N, Cassini D, Popivanov G, Henry BM, *et al*. The role of emergency laparoscopic colectomy for complicated sigmoid diverticulits: a systematic review and meta-analysis. Surgeon 2019;17:360–369. doi: 10.1016/j.surge.2018.08.010.

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