

## A Rare Complication of the Parastomal Hernia: Extensive Colonic Ischemia

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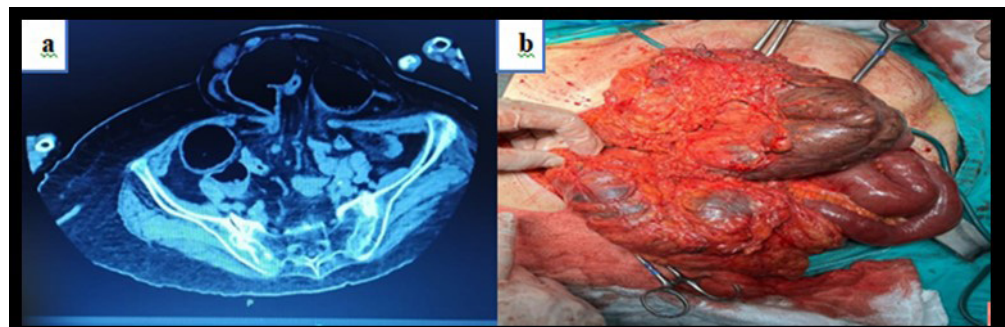
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Surgery, 16310, Bursa, Türkiye.E-mail: [alik8161@hotmail.com](mailto:alik8161@hotmail.com)**Dear Editor,**

Parastomal hernia (PH) is a condition caused by migration of abdominal viscera or tissue into the fascial defect around the stoma. The probability of PH after ostomy can be seen up to 65%. Although the ostomy increases patient survival, it may also increase postoperative complications. Incarceration or strangulation of the small and large intestine in the hernia is rarely seen [1,2]. We present an elderly female patient with extensive colonic necrosis due to strangulation in PH.

An 88-year-old female patient was admitted to the emergency department with complaints of diffuse abdominal pain and nausea for two days. The patient's medical history revealed that she underwent abdominoperineal resection (miles) and a permanent end colostomy for anorectal cancer 20 years ago. The patient had congestive heart disease and hypertension. The patient was also obese (body weight index: 30). Physical examination revealed a laparotomy scar in the midline of the abdomen and a colostomy in the left side of the abdomen. In addition, a 30x25 cm PH was detected around the colostomy. Abdominal palpation detected diffuse abdominal tenderness and rebound. White blood cell count was 13.500/mm<sup>3</sup> and C-reactive protein was 6.5 mg/L. Biochemical parameters were within normal values. Computed tomography showed that the hepatic flexura, transverse colon, splenic flexura, descending colon, and sigmoid colon segments were in PH (Figure 1a). The patient was operated under emergency conditions because of acute abdomen. All colon segments were ischemic and necrosed until the middle of the ascending colon (Figure 1b).



**Figure 1.a.** Strangulated colonic segments in parastomal hernia in computed tomography, **b.** Necrotic colonic segments

In addition, since a 1x2 cm polyp was detected in the cecum, total colectomy and end ileostomy were performed. During postoperative intensive care unit follow-up, the patient's general condition deteriorated and the patient died one day after the operation.

Parastomal hernia was observed up to 28% in patients with ileostomy and 48% in patients with end colostomy [3,4]. Patient-related risk factors for PH are advanced age, female gender, obesity, systemic infection, smoking, collagen disorder, obstructive uropathy, diabetes mellitus, constipation, chronic obstructive pulmonary disease, and presence of colostomy for more than 10 years. The factors related to the surgical technique for PH are inappropriate stoma selection, stoma being larger than 2.5 cm, excessive separation and tension in the rectus abdominal muscle, epigastric nerve denervation, and emergency stoma forming [4]. The patient presented had a lot of risk factors for PH such as advanced age, female gender, obesity, and presence of end colostomy for 20 years. Although there are no guidelines for the management of ostomy-related PH, this complication can be treated surgically or non-surgically. Weight loss in obese patients may help to improve the symptoms of PH. The surgical method used in PH varies depending on the patient's hemodynamic status and organ necrosis/ischemia. It was stated in literature that early treatment of PH with tension-free mesh reduces the rate of late complications [5]. PH should be repaired with tension-free mesh in early stage to avoid serious complications.

Sincerely,

## REFERENCES

- [1] Seang S, Hort A, Gosal PKS, Richardson M. (2022). A Case of Perforated Cholecystitis into a Parastomal Hernia. *Case Rep Surg*; 2058051. <https://doi.org/10.1155/2022/2058051>
- [2] Eastment J, Burstow M. (2018). Parastomal stomach herniation complicated by gastric outlet obstruction: a case report and literature review. *Int J Surg Case Rep*; 53:273–276. <https://doi.org/10.1016/j.ijscr.2018.10.049>
- [3] Tsujinaka S, Tan KY, Miyakura Y, Fukano R, Oshima M, Konishi F, Rikiyama T. (2020). Current Management of Intestinal Stomas and Their Complications. *J Anus Rectum Colon*. 4: 25-33 <https://doi.org/10.23922/jarc.2019-032>
- [4] Ekowo OE, Al Midani A, Abdulaal Y, Boshnaq M. (2020). Stomach in a parastomal hernia: a rare complication of stomas. *BMJ Case Rep*. 13. <https://doi.org/10.1136/bcr-2020-234325>
- [5] Köhler G, Koch OO, Antoniou SA, Lechner M, Mayer F, Klinge U, Emmanuel K. (2014). Parastomal hernia repair with a 3-D mesh device and additional flat mesh repair of the abdominal wall. *Hernia*. 18: 653-661. <https://doi.org/10.1007/s10029-014-1302-0>

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