

Strangulated Paraileostomy Hernia with Gangrenous Biliary Vesicle: A Case Report

Isaac José FelipeCorrêaNeto^{3*}, Leonardo Christian Laia², Diego PalmeiraRangel¹, Angelo Cecchini³, Hugo HenriquesWatté³, Alexander SáRolim³, RogérioFreitas³ and LaércioRobles⁴

¹Resident of the Coloproctology Service of Santa Marcelina Hospital, São Paulo, Brazil

²Assistant at the Oncological Surgery service of Santa Marcelina Hospital, São Paulo, Brazil

³Assistant at the Coloproctology Service of Santa Marcelina Hospital, São Paulo, Brazil

⁴Head of the Department of Surgery and Coordinator of Medical Residencies in Coloproctology at Santa Marcelina Hospital, São Paulo, Brazil

Received: 3 March, 2017; Accepted: 15 March, 2017; Published: 31 March, 2017

*Corresponding author: Isaac José FelipeCorrêaNeto, Assistant at the Coloproctology Service of Santa Marcelina Hospital, São Paulo, Brazil, E-mail: isaacneto@hotmail.com

Abstract

Parastomal hernia (PH) is a type of incisional hernia which forms together with the opening of the abdominal wall used for the externalization of a stoma and the risk of parastomal hernia is increases in cases of technical error, advanced age, increased intra-abdominal pressure, ascites, skin infection, intestinal constipation, malnutrition, chronic cough, obesity, diabetes mellitus, a sedentary lifestyle, immunosuppression and corticosteroid use.

Objective: The aim of this article is to report a case of paraileostomy hernia involving the biliary vesicle.

Case report: female patient, 80 years of age, with a previous history of radical cystectomy with Bricker ileostomy, complaining of colic abdominal pain in the lower right quadrant for 5 days and gradual progression associated with vomiting and fecal constipation, but with the expulsion of flatulence. At admission the patient presented a distended abdomen, with evidence of a voluminous incisional hernia in the median operating wound, as well as paraileostomy hernia where pain and hyperemia were present in the anterior axillary line

Conclusion: Incarceration and strangulation of the biliary vesicle in a paraileostomal hernia of a Bricker is an extremely rare gastrointestinal condition of urgency with a diagnosis made generally intraoperatively

Introduction

Parastomal hernia (PH) is a type of incisional hernia which forms together with the opening of the abdominal wall used for the externalization of a stoma, carrying the risk of complicating irrigation and the formation of collecting spaces, giving pain and discomfort due to body image deformation, which has already been altered by the presence of the stoma, as well as the risk of occasional incarceration and stragulation of the contents [1].

It is the most frequent complication following creation of intestinal stomas with a highly variable level of incidence; in around 28% of ileostomies and 58% of colostomies [2,3]. However, there have been studies citing incidence of this

complication of up to 100%, where around 30% of patients will require surgery to correct the condition to alleviate symptoms or in emergency situations [4,5].

Furthermore, it is known that the incidence of PH increases over time, and that the majority occur inside the first two years following formation of the stoma [6,7].

The risk of parastomalhernia is increases in cases of technical error, advanced age, increased intra-abdominal pressure, ascites, skin infection, intestinal constipation, malnutrition, chronic cough, obesity, diabetes mellitus, a sedentary lifestyle, immunosuppression and corticosteroid use, and the probability of this complication's occurrence is reduced by the externalization of the stoma through the straight abdominal muscles [2,3,6,8,9].

The aim of this article is to report a case of paraileostomy hernia involving the biliary vesicle.

Case Report

A female patient and 80 years of age complaining of colic abdominal pain in the lower right quadrant for 5 days and gradual progression associated with vomiting and fecal constipation, but with the expulsion of flatulence. The patient had a previous history of radical cystectomy with Bricker ileostomy as a result of stage II spinocellular carcinoma of the bladder, having been submitted to auxiliary therapy in conjunction with chemotherapy in 1999.

At admission the patient presented a distended abdomen, with evidence of a voluminous incisional hernia in the median operating wound, as well as paraileostomy hernia where pain and hyperemia were present in the anterior axillary line. Bricker type ileostomy showed itself as functioning with clear diuresis.

Complementary examinations showed 19490 leukocytes with a left shift and abdominal radiography with hydroseral levels and signs of coin stacking in the small intestine.

The patient was submitted to exploratory laparotomy with a right sided paramedian incision, with evidence of a voluminous incisional hernia and paraileostomy with strangulation and gangrene in the hernial ring of the biliary vesicle that presents itself with thickened and gangrenous walls and with a calculated interior of approximately three centimeters.

The patient returned to the specialist outpatient clinic on the 20th postoperative day, without complaints of discomfort, with adequate functioning of the Bricker with clear diuresis and only evidence of discrete seroma around the operational incision. Anatomopathology showed acute gangrenous cholecystitis.

Discussion

Despite the global incidence of PH being between 30-50%, with rates following Bricker of 5-65%, surgical repair of this condition is carried out in approximately 30% of cases of this type of hernia [4,5,8-10]. However, there is a risk of conditions such as strangulation, obstruction, ischemia and perforation, all of these leading to immediate indication for urgent surgery [10].

In the majority of cases, the content of the PH is composed of the small and large bowel and omentum. The occurrence involving the biliary vesicle is extremely rare, with only one case reported in the literature in which the treatment prescribed was conservative [11]. This is the first report of surgical treatment in a case of paraileostomal hernia with contents composed of gangrenous biliary vesicle.

The principal explanation for the involvement of the biliary vesicle in a PH is the presence of an extraordinarily mobile vesicle with exuberant peritoneum being involved with the abdominal hernial sac, in the opposing occurrence, with an extremely short or even absent mesentery that allows mobility of the biliary vesicle on its vertical axis and the presence of biliary vesicle in increased dimensions [12-15].

The literature review, even with few publications included, and in a related issue to the torsion and volvulus of the biliary vesicle, reported a higher incidence in women with a peak in the sixth decade of life [13]. The principal clinical manifestations of are abdominal pain in topography of incisional hernia, nausea and vomiting, and it can develop into intestinal obstruction with signs of systemic inflammatory response syndrome (SIRS) and sepsis if left untreated, with progression of strangulation to gangrenous cholecystitis and peritonitis. Diagnosis can be made in the preoperative and intraoperative phases [12].

This is a case report in an 80 year old patient, presenting abdominal pain and vomiting without clinical improvement and hyperemia in topography of parastomal hernia with abdominal radiography showing air fluid levels in the small intestine. Surgery was indicated by the hypothesis of strangulation of the small intestine, with an intraoperative diagnosis of gangrene in the biliary vesicle.

Conclusion

Incarceration and strangulation of the biliary vesicle in a paraileostomal hernia of a Bricker is an extremely rare

gastrointestinal condition of urgency with a diagnosis made generally intraoperatively, with this the first and only case currently reported in the literature.

The constant need for meticulous surgical technique should be emphasized in the production of stomas, not relegating this surgical stage to a task for the least experience of the operating team.

References

1. Almeida, FFN, Araújo SEA, Tacconi MRO, Habr-ama A, Marques CFS, Lupinacci R, et al. Resultados do tratamento cirúrgico das hérnias paracolostômicas análise de 17 casos. Rev. Esc. Enf. USP. 1999;33. número especial.
2. Gordon PH, Nivatvongs. Principles and Practice of Surgery for the Colon, Rectum and Anus, 3th ed. New York, Informa Healthcare. 2007;293-332.
3. Carvalho CG, Vale CEP, Castro Jr PC. Experiência inicial no tratamento das hérnias paraestomais. Rev bras Coloproct. 2008;28(2):251-256.
4. Von Smitten K, Husa A, Kyllönen L. Long-term results of sigmoidostomy in patients with anorectal malignancy. Acta Chir Scand. 1986;152:211-213.
5. Sjö Dahl R, Anderberg B, Bolin T. Parastomal hernia in relation to site of the abdominal stoma. Br J Surg. 1988;75(4):339-341.
6. Martin, L, Foster G. Parastomal hernia. Ann R Coll Surg Engl. 1996;78(2):81-84.
7. Shellito PC. Complications of abdominal stoma surgery. Dis Colon Rectum. 1998;41(12):1562-1572.
8. Israelsson LA. Paraestomal hérnias. Surg Clin North Am. 2008;88(1):113-125.
9. Ruiz GT, Yeste JSP, Sanz CM, Bogajo MLH. Eventración paraestomal: antecedentes, estado actual y expectativas de futuro. Cir Esp 2010;87:339-349.
10. Farnham SB, Cookson MS. Surgical complications of urinary diversion. World J Urol. 2004;22(3):157-167.
11. Garcia RM, Brody F, Ponsky TA. Parastomal herniation of the gallbladder. Hernia. 2005;9(4):397-399.
12. Heppell J, St Peter SD. Surgical images: soft tissue incarcerated gallbladder in parastomal hernia. Can J Surg. 2005;48(1):46.
13. Bach DB, Satin R, Palayew M, Lisbona R, Tessler F. Herniation and strangulation of the gallbladder through the foramen of Winslow. AJR. 1984;142(3):541-542.
14. Janakan G, Ayantunde AA, Hoque H. Acute gallbladder torsion: an unexpected intraoperative finding. World J Emerg Surg. 2008;22:3-9.
15. Vedat B, Aziz S, Cetin K. Evisceration of gallbladder at the site of a Pezzer drain: a case report. Cases Journal. 2009;2(8601):1-4.