


CASE REPORT

The use of laparoscopic rectopexy to manage rectal prolapse with Pseudo-Meigs' syndrome in a 64-year-old female: a case report

Takayuki Kondo , Masashi Tsuruta, Hirotoishi Hasegawa, Koji Okabayashi, Kohei Shigeta, Tetsu Hayashida & Yuko Kitagawa

Department of Surgery, Keio University School of Medicine, Tokyo, Japan

Correspondence

Masashi Tsuruta, Department of Surgery, Keio University School of Medicine, 35 Shinano-machi, Shinjuku-ku, Tokyo, Japan. Tel: +81-3-3353-1211; Fax: +81-3-3355-4707; E-mail: championsuru@yahoo.co.jp

Funding Information

No sources of funding were declared for this study.

Received: 8 January 2016; Revised: 15 October 2016; Accepted: 19 February 2017

Clinical Case Reports 2017; 5(5): 642–644

doi: 10.1002/ccr3.918

Introduction

Meigs' syndrome is defined as the coexistence of benign ovarian fibroma, hydrothorax, and ascites. By contrast, Pseudo-Meigs' syndrome is limited to other ovarian or pelvic tumors associated with hydrothorax and ascites [1]. Both are treated by resectioning of the tumors, which could control the fluid accumulation in the thorax and abdomen [2].

Although many different types of operative methods are chosen to treat rectal prolapse, rectopexy is considered the most appropriate in terms of curability, but its use is limited because of its invasiveness. Laparoscopic rectopexy is expected to expand its indication even to elderly patients; however, it is unclear whether patients with a large volume of ascites due to Pseudo-Meigs' syndrome would be candidates for laparoscopic rectopexy.

We herein report a case of rectal prolapse caused by ascites from Pseudo-Meigs' syndrome that was successfully managed with laparoscopic surgery.

Case Report

A 64-year-old female presented to our surgical outpatient department complaining of discomfort caused by rectal

Key Clinical Message

We report a rare case of rectal prolapse with Pseudo-Meigs' syndrome in which laparoscopic bilateral oophorectomy and rectopexy were performed simultaneously and resulted in improved quality of life due to the loss of ascites and the repair of rectal prolapse. Laparoscopic surgery is feasible for rectal prolapse with Pseudo-Meigs' syndrome.

Keywords

Laparoscopic surgery, Pseudo-Meigs' syndrome, rectal prolapse, rectopexy.

prolapse and abdominal distension attributable to ascites. She had been receiving outpatient chemotherapy to treat breast cancer with metastasis for 13 years, which she had commenced after a left-sided mastectomy, and her survival prognosis was estimated to be more than 1 year according to previous reports [3–5]. Computed tomography (CT) revealed complete rectal prolapse; disseminated masses, including an ovarian metastasis; pleural effusion; and large amounts of ascitic fluid (especially in the pelvic cavity) (Fig. 1). She underwent laparoscopic rectopexy to repair the rectal prolapse. During the procedure, approximately 3500 mL of slightly yellow transparent ascitic fluid was aspirated. As large ovarian metastases covered the pelvic cavity and impeded the procedure, we first performed a bilateral oophorectomy. The rectum was then dissected in the mesorectal plane to the level of the levators and subsequently stapled to the sacral bone around the region of the promontory (Fig. 2). The patient was discharged on day 10 after surgery with no apparent complications and continued to receive outpatient chemotherapy. Pathological examination revealed that the ovarian tumors were compatible with breast cancer metastases. At the 1-year follow-up, no relapse was evident in terms of abdominal or thoracic fluid or rectal prolapse (Fig. 1).

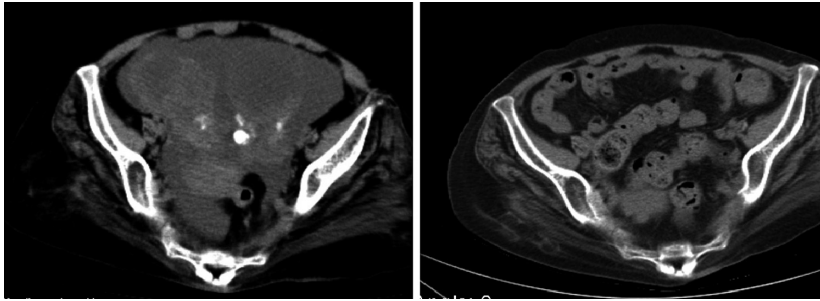


Figure 1. (Left) Preoperative computed tomography (CT) scan: Enlarged bilateral ovaries (white arrows) and a large amount of ascites fluid are evident in the pelvic cavity. (Right) Postoperative CT scan taken 2 months after surgery: Both ovaries have been resected and the ascites has disappeared.

Thus, laparoscopic surgery was useful to treat both the rectal prolapse and Pseudo-Meigs' syndrome.

Discussion

This case emphasizes that laparoscopic rectopexy can be used to treat rectal prolapse in the presence of comorbidities and that treatment of Pseudo-Meigs' syndrome improves quality of life and reduces the rectal prolapse relapse rate.

Many different operative methods are used to treat rectal prolapse [6]. No evidence-based treatment guidelines are available. This is not surprising because data are lacking. However, the only potentially curative treatment for complete rectal prolapse is rectopexy [7]. Thus, rectopexy should be chosen whether general anesthesia is acceptable. A comparative study demonstrated that laparoscopic suture rectopexy is a safe and feasible procedure and has comparable results with regard to operative time,

morbidity, bowel function, and recurrence; it even has slightly better results than mesh rectopexy. Furthermore, the cost of the mesh used in mesh rectopexy is absent in suture rectopexy [8], and it is unclear whether mesh rectopexy might be safe and feasible for patients with multiple peritoneal dissemination. Therefore, rectopexy without mesh was chosen in this case.

A recent systematic review showed that laparoscopic colorectal surgery in the elderly afforded significant advantages in terms of short-term outcomes [9]. As the incidence of rectal prolapse increases with age, the use of laparoscopic methods might be able to extend surgical indications to elderly, fragile patients. One small randomized clinical trial showed that laparoscopic rectopexy was associated with less postoperative pain, an earlier return to alimentation, an earlier discharge from the hospital, and lower-level relapse, at the expense of needing a longer operation time compared to open methods [10–12].

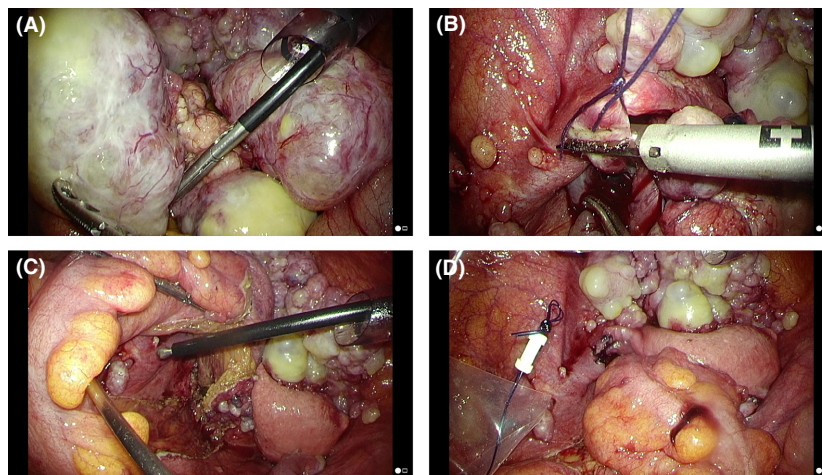


Figure 2. (A) Both ovaries were enlarged within the pelvic cavity and covered the rectum. (B) The ovarian artery and vein were ligated, and both ovaries were then resected using an ultrasonic coagulation device. (C) The rectum was completely mobilized down to the level of the levators. (D) The rectum was attached to the promontory by staples.

Additionally, laparoscopy permits visualization of the entire abdominal cavity, facilitating simultaneous treatment of several pathological lesions. In our present case, laparoscopic management was chosen not only to reduce the relapse rate but also to prevent the development of an abdominal incisional hernia attributable to increased intra-abdominal pressure from ascites. As large ovarian metastases covered the pelvic cavity and impeded the procedure, we first performed a bilateral oophorectomy. This effectively treated the Pseudo-Meigs' syndrome. Additionally, mitigation of the ascites prevented prolapse recurrence. Palliative treatment (i.e., the Miwa-Gant procedure) would not be expected to prevent early relapse because of the abundant ascites associated with Pseudo-Meigs' syndrome. In this case, neither pleural effusion nor ascites were clinically evident; therefore, they did not affect the decision to perform the oophorectomy. If the patient were obese, it may have impeded the ability to clinically identify the presence of large ascites. However, the ascites contributed to the rectal prolapse, and the oophorectomy was thus useful.

To the best of our knowledge, this is the first case in which rectal prolapse and Pseudo-Meigs' syndrome have been simultaneously treated and successfully managed by laparoscopic surgery. Such surgery may thus be considered as the first choice when treating patients with rectal prolapse and Pseudo-Meigs' syndrome.

Acknowledgments

The authors thank the Project Fostering of Cross-Sectional Endoscopic Surgery Specialists at Keio University for their help throughout this work.

All authors read and approved the manuscript. The English in this document has been checked by at least two professional editors, both native speakers of English. For a certificate, please see: <http://www.textcheck.com/certificate/bg0dOT> and Wiley Editing Services (Certificate Verification Key: 3C5A-6218-521D-18A5-B487).

Authorship

TK, MT, HH, KO, KS and YK: designed the research; TK, MT, and TH: collected clinical information; TK and MT: wrote the paper.

Conflict of Interest

The authors have no conflict of interests.

References

1. Riker, D., and D. Goba. 2013. Ovarian mass, pleural effusion, and ascites: revisiting meigs syndrome. *J. Bronchology. Interv. Pulmonol.* 20:48–51.
2. Kazanov, L., D. S. Ander, E. Enriquez, and F. M. Jaggi. 1998. Pseudo-Meigs syndrome. *Am. J. Emerg. Med.* 16:404–405.
3. Demopoulos, R. I., L. Touger, and N. Dubin. 1987. Secondary ovarian carcinoma: a clinical and pathological evaluation. *Int. J. Gynecol. Pathol.* 6:166–175.
4. Gagnon, Y., and B. Têtu. 1989. Ovarian metastases of breast carcinoma. A clinical and pathological study of 59 cases. *Cancer* 64:892–898.
5. Le Bouëdec, G., M. De La Tour, O. Levrel, and J. Dauplat. 1997. Tumeurs de Krükenberg d'origine mammaire. *Press Med.* 26:454–458.
6. Rickert, A., and P. Kienle. 2015. Laparoscopic surgery for rectal prolapse and pelvic floor disorders. *World J. Gastrointest Endosc.* 7:1045–1054.
7. Faucheron, J. L., B. Trilling, E. Girard, P. Y. Sage, S. Barbois, et al. 2015. Anterior rectopexy for full-thickness rectal prolapse: technical and functional results. *World J. Gastroenterol.* 21:5049–5055.
8. Sahoo, M. R., A. K. Thimmegowda, and M. S. Gowda. 2015. A single centre comparative study of laparoscopic mesh rectopexy versus suture rectopexy. *J. Minim. Access Surg.* 10:18–22.
9. Seishima, R., K. Okabayashi, H. Hasegawa, M. Tsuruta, K. Shigeta, et al. 2015. Is laparoscopic colorectal surgery beneficial for elderly patients? A systematic review and meta-analysis. *J. Gastrointest Surg.* 19:756–765.
10. Solomon, M. J., C. J. Young, A. A. Evers, and R. A. Roberts. 2002. Randomized clinical trial of laparoscopic versus open abdominal rectopexy for rectal prolapse. *Br. J. Surg.* 89:35–39.
11. Tou, S., S. R. Brown, A. I. Malik, and R. L. Nelson. 2008. Surgery for complete rectal prolapse in adults. *Cochrane Database Syst. Rev.* 2008 8:CD001758.
12. Bishawi, M., C. Foppa, S. Tou, R. Bergamaschi, and The Rectal Prolapse Recurrence Study Group. 2015. Recurrence of rectal prolapse following rectopexy: a pooled analysis of 532 patients. *Colorectal Dis.* 2016;18:779–84.