

Leyomiomatosis peritonealis disseminata associated with ovarian endometriosis in a patient submitted to hysteroscopic myomectomy

Mohamed Mabrouk, M.D., Ph.D.,^{a,b} Alessandro Arena, M.D.,^a Diego Raimondo, M.D.,^a Matteo Parisotto, M.D.,^a Giacomo Caprara, M.D.,^c and Renato Seracchioli, M.D.^a

^a Gynaecology and Human Reproduction Physiopathology, Department of Obstetrics and Gynecology, DIMEC, S.Orsola Hospital, University of Bologna, Bologna, Italy; ^b Department of Obstetrics and Gynecology, Faculty of Medicine, University of Alexandria, Alexandria, Egypt; and ^c Histopathological and Molecular Diagnostic Unit of Solid Organ and Transplant, S. Orsola Hospital, University of Bologna, Bologna, Italy

Objective: To describe laparoscopic management of a case of leiomyomatosis peritonealis disseminata associated with ovarian endometriosis.

Design: Surgical video article.

Setting: Academic hospital.

Patient: We present a case of a 30-year-old woman referred to our clinic for abdominal and pelvic pain and dyspareunia. A hysteroscopic myomectomy was reported as previous surgical history. At ultrasound examination, a left ovarian cyst of 4 cm suspected for typical endometrioma and a mild hydronephrosis of left kidney were revealed. The patient was scheduled for laparoscopic surgery.

Interventions: During laparoscopy, multiple nodules were found simulating widespread metastases involving colon, small bowel, omentum, right diaphragmatic dome, gastric surface, vesico-uterine area and abdominal peritoneum. Several biopsies and a peritoneal washing were performed, suspecting a peritoneal carcinomatosis. The histological frozen section examination revealed a possible benign disease, requiring further immunohistochemical study that diagnosed leiomyomatosis peritonealis. A second laparoscopy was then performed after one month. Enucleation of the left ovarian endometriotic cyst with classic stripping technique was performed. The left ureter was compressed by a fibrotic nodule of 5 cm that was isolated and removed. Operating time was 80 minutes. The postoperative course was uneventful and the patient was discharged on postoperative day 2.

Main Outcome Measures: Description of a case of leiomyomatosis peritonealis disseminata in a patient with no previous history of intra-abdominal morcellation.

Results: The removal of the left ovarian endometriotic cyst and the periureteral nodule was successfully performed. The patient reported good health conditions without hydronephrosis at six months follow up visit.

Conclusions: Leiomyomatosis peritonealis disseminata is a rare clinical disorder characterized by proliferation of nodules, consisted by smooth muscle cells. The association of this condition with endometriosis has been described in other studies. Despite several medical therapies have been proposed (chemotherapy, aromatase inhibitor, gonadotropin-releasing hormone agonist), surgical excision remains a good option, frequently performed for symptoms palliation. Laparoscopic approach might be considered the procedure of choice in case of symptomatic women with leiomyomatosis peritonealis disseminata. (Fertil Steril® 2019;■:■-■. ©2019 by American Society for Reproductive Medicine.)

Key Words: Leiomyomatosis peritonealis disseminate, endometriosis, laparoscopy

Discuss: You can discuss this article with its authors and other readers at <https://www.fertstertdialog.com/users/16110-fertility-and-sterility/posts/45497-27547>



Use your smartphone to scan this QR code and connect to the video for this article now.*

* Download a free QR code scanner by searching for "QR scanner" in your smartphone's app store or app marketplace.

Received December 24, 2018; revised February 21, 2019; accepted March 8, 2019.

M.M. has nothing to disclose. A.A. has nothing to disclose. D.R. has nothing to disclose. M.P. has nothing to disclose. G.C. has nothing to disclose. R.S. has nothing to disclose.

Reprint requests: Alessandro Arena, M.D., Gynaecology and Human Reproduction Physiopathology, DIMEC, S.Orsola Hospital, University of Bologna, 13, via Massarenti, 40138 Bologna, Italy (E-mail: alessandroarena1588@gmail.com).

Fertility and Sterility® Vol. ■, No. ■, ■ 2019 0015-0282/\$36.00

Copyright ©2019 American Society for Reproductive Medicine, Published by Elsevier Inc.

<https://doi.org/10.1016/j.fertnstert.2019.03.023>

VIDEO

NOW AVAILABLE ON YOUTUBE<https://youtu.be/L9Hn50dBbL0>**SUGGESTED READING**

1. Al-Talib A, Tulandi T. Pathophysiology and possible iatrogenic cause of leiomyomatosis peritonealis disseminata. *Gynecol Obstet Invest* 2010;69:239–44.
2. Yang R, Xu T, Fu Y, Cui S, Yang S, Cui M. Leiomyomatosis peritonealis disseminata associated with endometriosis: A case report and review of the literature. *Oncol Lett* 2015;9:717–20.
3. Lin YC, Wei LH, Shun CT, Cheng AL, Hsu CH. Disseminated peritoneal leiomyomatosis responds to systemic chemotherapy. *Oncology* 2008;76:55–8.
4. Takeda T, Masuhara K, Kamiura S. Successful management of a leiomyomatosis peritonealis disseminata with an aromatase inhibitor. *Obstet Gynecol* 2008;112(PART 2):491–3.
5. Hales HA, Peterson CM, Jones KP, Quinn JD. Leiomyomatosis peritonealis disseminata treated with a gonadotropin-releasing hormone agonist: a case report. *Am J Obstet Gynecol* 1992;167:515–6.