Video Article

Laparoscopic Excision of Severe Deep Infiltrating Endometriosis

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OBJECTIVE

This study aimed to demonstrate the anatomic marker in complete excision of endometriosis by a well-expertised surgeon in laparoscopic management of severe deep infiltrating endometriosis (DIE).

Design

We demonstrate the surgical technique step by step. During this procedure, we use the effective bipolar to achieve hemostasis and create retroperitoneal spaces from the patient with severe dysmenorrhea and severe DIE (revised American Fertility Society classification Stage IV).^[1,2]

Patient

The patient was a 43-year-old woman, G2P2, suffered from severe dysmenorrhea and diagnosed by ultrasonography with a 5.7 cm \times 4.3 cm right endometrioma and deep infiltrating endometriosis.^[3]



Figure 1: Intraoperative photographs (a) Left ureterolysis was done. (b) Excision of endometriotic lesions of left uterosacral ligament

Keywords: Laparoscopy, deep infiltrating endometriosis (DIE)

Interventions

Three-handed operative laparoscopy with the 10 mm umbilicus port was applied. Intraoperatively, in addition to the right endometrioma, DIE was observed at both uterosacral ligaments (USL) with partial obliteration of cul-de-sac. After lysis of intrapelvic adhesions, rupture and enucleation of the right endometrioma was done. Bilateral ureterolysis was performed after identifying retroperitoneal space [Figure 1a].^[4] After dissection of the left pararectal space, excision of endometriotic lesions of the left USL was done [Figure 1b]. Prerectal space was dissected then. The pouch of Douglas was partially obliterated by adhesions, which was also lysed to correct her pelvic anatomy as normal as possible [Figure 2a and b]

RESULTS

The endometriotic lesions of the right USL were also excised. Complete excision of endometriosis was achieved. The



Figure 2: (a) Preoperative and (b) postoperative uterine contour. http:// www.apagemit.com/page/video/show.aspx?num=261&page=1

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histopathology of all excised tissues was consistent with endometriosis. No adjuvant therapy was given for this patient. Her ultrasonography and CA-125 at 3 months postoperatively showed no recurrence of endometrioma and the patient has remained asymptomatic till date.

CONCLUSION

This case highlights that the gynecologist who performs laparoscopic excision of DIE should be well expertized and complete surgical excision during the first time. Identifying the retroperitoneal space and ureter and correcting pelvic anatomy are the keys of success in treating DIE patients.^[5-7]

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Supplementary materials

Supplementary material associated with this article be found in the online version at http://www.apagemit.com/page/video/ show.aspx?num=261&page=1.

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Conflicts of interest

Prof. Chyi-Long Lee, an editorial board member at *Gynecology* and *Minimally Invasive Therapy*, had no role in the peer review process of or decision to publish this article. The other authors declared no conflicts of interest in writing this paper.

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REFERENCES

- Scioscia M, Bruni F, Ceccaroni M, Steinkasserer M, Stepniewska A, Minelli L. Distribution of endometriotic lesions in endometriosis stage IV supports the menstrual reflux theory and requires specific preoperative assessment and therapy. Acta Obstet Gynecol Scand 2011;90:136-9.
- Yen CF, Kim MR, Lee CL. Epidemiologic factors associated with endometriosis in East Asia. Gynecol Minim Invasive Ther 2019;8:4-11.
- Guerriero S, Ajossa S, Orozco R, Perniciano M, Jurado M, Melis GB, et al. Accuracy of transvaginal ultrasound for diagnosis of deep endometriosis in the rectosigmoid: Systematic review and meta-analysis. Ultrasound Obstet Gynecol 2016;47:281-9.
- Uwais A, Huang KG, Valino MC, Atileh LA. Laparoscopic identification of double ureter variant in severe endometriosis. Gynecol Minim Invasive Ther 2018;7:141-2.
- Vignali M, Bianchi S, Candiani M, Spadaccini G, Oggioni G, Busacca M. Surgical treatment of deep endometriosis and risk of recurrence. J Minim Invasive Gynecol 2005;12:508-13.
- Centini G, Afors K, Murtada R, Argay IM, Lazzeri L, Akladios CY, *et al.* Impact of laparoscopic surgical management of deep endometriosis on pregnancy rate. J Minim Invasive Gynecol 2016;23:113-9.
- Kishi Y, Yabuta M. The benefit of adenomyomectomy on fertility outcomes in women with rectovaginal endometriosis with coexisting adenomyosis. Gynecol Minim Invasive Ther 2017;6:20-4.