### Video Article

# Easy and Standardized Technique for the Dissection of Severe Pouch of Douglas Obliteration Mainly by Blunt Dissection in Total Laparoscopic Hysterectomy for Deep Infiltrating Endometriosis

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# **OBJECTIVE**

This video is for clinicians unfamiliar with deep infiltrating endometriosis (DIE) who need to perform dissections when encountering endometriosis unexpectedly and desire to perform blunt/safe dissections. Although endometrial nodule excision is useful in DIE,<sup>[1-4]</sup> some studies found no difference between patients' pain perception during cauterization and excision.<sup>[5,6]</sup> Definitive evidence for the superiority of surgery over medication is lacking.<sup>[7,8]</sup> Aggressive resection for DIE causes rectal fistulae in approximately 4% of patients.<sup>[9]</sup> Obstetrics and gynecology residents can perform this standardized blunt dissection for endometriosis accompanied by severe pouch of Douglas obliteration.

# **D**ESIGN

Step-by-step video demonstration of the surgical technique.

Ethical approval and Human experimentation: Institutional Review Board approval was obtained before commencement of the experiment.

# SETTING

Laparoscopic hysterectomy for patients with DIE.

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### INTERVENTIONS

The standardized procedure is as follows, wherein dorsal dissection is performed after releasing ventral tension [Video 1]:

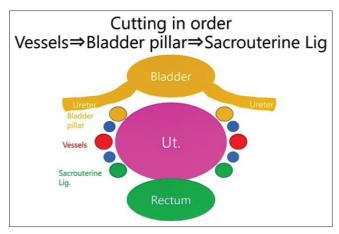
- (1) Detach the ovaries from the broad and sacrouterine ligaments; initially, endometriosis is managed by blunt dissection. On pushing, the suction tube reaches the weakest part of the adhesion. Lifting the ovaries upward is crucial to make the dissection lines more apparent. Dissection of the ovaries makes the dissection line of the rectum more distinct. Subsequently, the rectum and uterine body can be partially dissected (dissect from the lateral side, change the tension of the manipulator frequently, and turn to the central part; adhesions of the rectum and uterus are addressed last.
- (2) Establish the paravesical and Lazko/Okavayashi pararectal spaces and locate the uterine artery and ureter. If the paravesical and Lazko/Okavayashi pararectal spaces are developed, the ureteral course can be identified.
- (3) Dissect the bladder, ligating the round ligament and the ligament of the ovary or infundibulopelvic ligament. Thereafter, dissect the bladder pillar, releasing ventral tension.
- (4) By following the ureter to its crossing point with the uterine artery, the outlines of the sacrouterine ligament and rectum become apparent.

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**Figure 1:** The parametrium was resected in the following order: vessels, bladder pillar, and sacrouterine ligament. http://www.apagemit.com/page/video/show.aspx?num=299

(5) Thereafter, dissect the rectum, ligate the ascending uterine vessels, and resect the attached point of the bladder pillar. Finally, resect the uterus intrafascially [Figure 1].

A gynecologist performed all procedures, without a gastroenterologist.

## CONCLUSION

This safe and easy standardized technique facilitates dissection of uteri with severe pouch of Douglas adhesions and is useful for clinicians unfamiliar with DIE.

### **Declaration of patient consent and Ethical approval**

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

This article was approved from the appropriate ethics review board (Approval number: S21-159).

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Nil.

### **Conflicts of interest**

There are no conflicts of interest.

### REFERENCES

- Khan S, Lee CL. Treating deep endometriosis in infertile patients before assisted reproductive technology. Gynecol Minim Invasive Ther 2021;10:197-202.
- Wu KL, Chua PT, Lee CL. Laparoscopic "Shaving" for Infiltrative External Adenomyosis of Bowel Muscularis and Concomitant Deep Infiltrating Endometriosis. Gynecol Minim Invasive Ther. 2021;10:265-7.
- Htut HT, Liu HM, Lee CL. Laparoscopic excision of severe deep infiltrating endometriosis. Gynecol Minim Invasive Ther 2022;11:76-7.
- Yen CF, Kim MR, Lee CL. Epidemiologic Factors Associated with Endometriosis in East Asia. Gynecol Minim Invasive Ther. 2019;8:4-11.
- Fritzer N, Hudelist G. Love is a pain? Quality of sex life after surgical resection of endometriosis: A review. Eur J Obstet Gynecol Reprod Biol 2017;209:72-6.
- Anaf V, Simon P, El Nakadi I, Simonart T, Noel J, Buxant F. Impact of surgical resection of rectovaginal pouch of Douglas endometriotic nodules on pelvic pain and some elements of patients' sex life. J Am Assoc Gynecol Laparosc 2001;8:55-60.
- D'Alterio MN, D'Ancona G, Raslan M, Tinelli R, Daniilidis A, Angioni S. Management challenges of deep infiltrating endometriosis. Int J Fertil Steril 2021;15:88-94.
- Bafort C, Beebeejaun Y, Tomassetti C, Bosteels J, Duffy JM. Laparoscopic surgery for endometriosis. Cochrane Database Syst Rev 2020;10:CD011031.
- Roman H, Tuech JJ, Huet E, Bridoux V, Khalil H, Hennetier C, et al. Excision versus colorectal resection in deep endometriosis infiltrating the rectum: 5-year follow-up of patients enrolled in a randomized controlled trial. Hum Reprod 2019;34:2362-71.