

Laparoscopic Resection of Diaphragmatic Endometriosis in 10 Steps

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▶ To cite this version:

Nicolas Bourdel, Valentina Fava, Mihaela-Alexandra Budianu, Pauline Chauvet, Michel Canis, et al.. Laparoscopic Resection of Diaphragmatic Endometriosis in 10 Steps. Journal of Minimally Invasive Gynecology, 2019, 26, pp.1224 - 1225. 10.1016/j.jmig.2019.04.008. hal-03489076

HAL Id: hal-03489076

https://hal.science/hal-03489076

Submitted on 20 Jul 2022

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Video article

2 Laparoscopic resection of diaphragmatic endometriosis in 10 steps

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- 21 **Disclosure statement**: The authors declare that they have no conflicts of interest and
- 22 nothing to disclose. No funding was received for the realization of this video article.

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24 This video has not been published elsewhere and is not under review at any other journal.

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- 26 Precis
- We describe a new laparoscopic approach by a right lateral access combined with a trans-
- 28 diaphragmatic thoracoscopy to treat diaphragmatic endometriosis. The procedure is
- described in 10 steps.

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Abstract:

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- 33 Study Objective: Laparoscopic resection of diaphragmatic endometriosis has the
- 34 advantages of a minimally invasive approach. The standardization and description of the
- 35 technique are the main objectives of this video. We described the procedure in 10 steps to
- 36 make it easier and safer.
- 37 **Design:** Step-by-step video demonstration of the technique.
- 38 **Setting:** French university tertiary care hospital.
- 39 **Patients:** Patients with diaphragmatic endometriosis confirmed by MRI. The local
- 40 institutional review board ruled that approval was not required for this video article because
- 41 the video describes a technique and does not report a clinical case.
- 42 **Intervention:** There are no guidelines on the surgical treatment of diaphragmatic
- 43 endometriosis. We propose a laparoscopic approach by a right lateral access with the patient
- 44 on left lateral decubitus position.
- 45 **Measurements and Main Results:** This video presents the procedure divided in 10 steps.
- 46 1- Set up. 2- Patient position. 3- Installation of the trocars. 4- Releasing the liver. 5- Exposure
- of the diaphragmatic endometriosis. 6- Making a diaphragmatic defect. 7- Exploring the
- 48 thoracic cavity. 8- Resection of diaphragmatic endometriosis. 9- Inserting the suction
- 49 catheter. 10- Closing the diaphragmatic defect.
- 50 **Conclusion:** Standardization of laparoscopic resection of diaphragmatic endometriosis could
- 51 make this procedure easier and safer to perform. Left lateral decubitus helps to have a
- 52 complete exposure of the right diaphragmatic muscle and endometriosis. Presented 10 steps
- help to perform each part of surgery in logical sequence making the procedure ergonomic,
- easier to adopt and learn. Standardization of laparoscopic techniques could help to reduce
- 55 the learning curve.

| 57 | Keywords: diaphragmatic endometriosis; trans-diaphragmatic thoracoscopy; 10 steps |
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| 58 | |
| 59 | References |
| 60 | |
| 61 | 1. Chiantera V, Dessole M, Petrillo M, et al. Laparoscopic En Bloc Right Diaphragmatic |
| 62 | Peritonectomy for Diaphragmatic Endometriosis According to the Sugarbaker |
| 63 | Technique. J Minim Invasive Gynecol. 2016 Feb 1;23(2):198-205 |
| 64 | 2. Montoriol PF, Da Ines D, Bourdel N, Garcier JM, Canis M. Re: Thoracic |
| 65 | endometriosis syndrome: CT and MRI features. Clin Radiol 2014 May;69(5):549-50 |
| 66 | 3. Nezhat C, Nicoll LM, Bhagan L, et al. Endometriosis of the diaphragm: four cases |
| 67 | treated with a combination of laparoscopy and thoracoscopy. J Minim Invasive |
| 68 | Gynecol. 2009 Sep-Oct;16(5):573-80 |
| 69 | 4. Sihoe AD, Au SS, Cheung ML, et al. Incidence of chest wall paresthesia after video- |
| 70 | assisted thoracic surgery for primary spontaneous pneumothorax. Eur J Cardiothorac |
| 71 | Surg. 2004 Jun;25(6):1054–8 |
| 72 | 5. Fava V, Gremeau AS, Pouly JL, et al. Laparoscopic myomectomy in 10 steps. J |
| 73 | Minim Invasive Gynecol. 2019; DOI: 10.1016/j.jmig.2018.12.021. |
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75 List of attached video:

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- diaphragmatic endometriosis.mp4