



Contents lists available at ScienceDirect

## Gynecology and Minimally Invasive Therapy

journal homepage: [www.e-gmit.com](http://www.e-gmit.com)

## Video abstract

## Laparoendoscopic single-site myomectomy and the use of fibrin sealant (Tisseel)

Angelito Magno<sup>a</sup>, Hsin-Hong Guo<sup>b</sup>, Chyi-Long Lee<sup>b,c,\*</sup><sup>a</sup> Department of Obstetrics and Gynecology, De La Salle University Medical Center, Cavite and University of Perpetual Help Medical Center, Las Pinas, Philippines<sup>b</sup> Department of Obstetrics and Gynecology, Chang Gung Memorial Hospital, Linkou Medical Center, Taoyuan, Taiwan<sup>c</sup> Chang Gung University College of Medicine, Taoyuan, Taiwan

## ARTICLE INFO

## Article history:

Received 10 June 2015

Received in revised form 29 July 2015

Accepted 3 August 2015

Available online 4 November 2015

## ABSTRACT

Myomectomy remains the standard surgical treatment for women with uterine myoma, who wish to preserve their fertility. However, it is often associated with increased blood loss and adhesion formation. Laparoscopic myomectomy has multiple advantages over open myomectomy<sup>1</sup>. A newer approach, laparoendoscopic single-site surgery, also known as LESS, has been developed and applied in gynecologic field.<sup>2</sup> This is a case of a 41-year-old G2P1 patient, with the complaints of irregular menstrual cycles and lower abdominal pain for 6 months. Transvaginal ultrasound showed uterine myoma at the anterior corpus, measuring 6 × 5 cm<sup>2</sup>. The procedure is started by grasping the bilateral edges of the umbilicus with Allis forceps. A vertical incision, 1.5–2 cm, is made from the superficial skin of the umbilicus to the ventral peritoneum. A wound retractor of appropriate size is inserted and adjusted. A multiple instrument access port (LagisEndosurgical, Taichung, Taiwan) is placed over the wound retractor (Figure 1). Prior to the procedure, inspection of the pelvic organs is performed to determine the pathology. Vasopressin is injected over the area of the myoma to decrease blood loss. Location of the myoma is then identified. Uterine incision is made on the serosa over the area of the myoma using the monopolar scissors. Using a bipolar instrument LigaSure®, ValleyLab, Inc., Boulder, Colorado), the incision is extended until the myoma is exposed. The myoma is grasped gently using the tenaculum forcep, and dissected bluntly along with its pseudocapsule using the tip of suction irrigation gear. At the base of the myoma where feeding vessels may be located, coagulation by the advanced bipolar, is performed to prevent bleeding. The specimen is removed through the umbilicus. A sliding knot is made at the tail of one zero monofilament suture to fasten the anchor of the first knot. The uterus is then repaired with a continuous non-locking method. Hemostasis is ensured after the suturing. A fibrin sealant, Tisseel (Baxter Healthcare Corp., Deerfield, IL), is applied over the suture site as an adjunct to hemostasis and also to prevent adhesion. The fundamental advantage of LESS is less incision, as a result, improves cosmesis. LESS myomectomy has many technical difficulties, including reduced visualization, loss of triangulation, and instrument interference. Thus, the type, location and numbers of the myomas are critical to succeed LESS myomectomy. The Food and Drug Administration has approved fibrin sealant in 1998 as an adjunct to hemostasis and sealing. Besides, certain studies have reported its anti-adhesion property. Upon mixing of the two components in the lumens of Tisseel, the combinations of thrombin and fibrinogen transformed into fibrin, forming a rubber-like tissue that adheres to the wound surface.

Copyright © 2015, The Asia-Pacific Association for Gynecologic Endoscopy and Minimally Invasive Therapy. Published by Elsevier Taiwan LLC. All rights reserved.

\* Corresponding author. Division of Gynecologic Endoscopy, Department of Obstetrics and Gynecology, Chang Gung Memorial Hospital at Linkou, 5, Fu-Hsin Street, Kwei-Shan, Taoyuan 33305, Taiwan.

E-mail address: [leechyilong@gmail.com](mailto:leechyilong@gmail.com) (C.-L. Lee).



**Figure 1.** The LagiPort Kit (LagisEndosurgical, Taichung, Taiwan) is inserted into the umbilical incision. This kit includes a plastic wound retractor and a multiple instrument access port. *Note.* This is a caption from the original video. Please visit <http://www.apagemit.com/asurg/latest.asp> for the full video.

## References

1. Herrmann A, De Wilde RL. Laparoscopic myomectomy—The gold standard. *Gynecol Minim Invasive Ther.* 2014;3:31–38.
2. Chern BSM, Lakhota S, Khoo CK, Siow AYM. Single incision laparoscopic surgery in gynecology: evolution, current trends, and future perspectives. *Gynecol Minim Invasive Ther.* 2012;1:9–18.