

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. **Study Objective:** To determine whether kinesthetic learning using a simulated pelvic model while learning the uterine manipulation maneuvers of a laparoscopic hysterectomy improves learning compared to an interactive video module alone.

**Design:** Randomized controlled study.

Setting: Academic medical center.

Patients or Participants: Forty, first-year and second-year medical students who had never performed uterine manipulation

**Interventions:** A low-cost simulated pelvic model for kinesthetic learning during an interactive video module.

Measurements and Main Results: Forty, first-year and second-year medical students participated in the study, which included an interactive video module with formative assessment, summative assessment, cadaveric assessment, and qualitative post-participation survey. Participants were randomized to the intervention group (n=21) who used a simulated pelvic model for kinesthetic learning during the video module or the control group (n=19) who only had the video module to learn the uterine manipulation maneuvers of a laparoscopic hysterectomy. There was no difference between the control and intervention groups on final score, number of attempts, or time to completion of the summative assessment. On the cadaveric assessment, participants in the intervention group had fewer unnecessary movements with demonstration of both right pelvic sidewall (control 78.9%, intervention 42.9%, p<0.027) and left pelvic sidewall (control 94.7%, intervention 66.7%, p<0.046). This difference was increased in more novice first-year medical student participants (p<0.009). There was no difference between the control and intervention groups in the amount of force used, need for either verbal or physical cues, or time required to achieve each maneuver. Lastly, the participants in the intervention group reported higher perceived preparedness (100% versus 71.4% in control group, p<0.037).

**Conclusion:** Kinesthetic practice may not be required for learning the uterine manipulation maneuvers of a laparoscopic hysterectomy, but it may be beneficial for more novice learners and to increase learners' perceived preparedness. Our interactive video module alone may be sufficient to prepare learners to perform uterine manipulation maneuvers prior to the operating room.

#### Open Communications 17: Laparoscopy-Variety (3:15 PM — 4:15 PM)

#### 3:55 PM

# A Novel Access to the Sacrospinous Ligament and the Coccygeal Muscle

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**Study Objective:** This study aimed to describe a novel access route to the sacrospinous ligament and the coccygeal muscle. The overarching goal was to show our team's standard systematization to this technique and state it's safety in low parametric injuries.

**Design:** Video description of the novel technique with clear illustrations of each step.

#### Setting: N/A.

**Patients or Participants:** The surgery was performed in a 27-year-old woman who suffered from deep endometriosis in the pelvic floor. Her diagnosis was performed through physical examination, with innervation compression symptoms, ultrasound and MRI imaging techniques.

**Interventions:** After the identification and release of the central structures, we proceed to the lateral approach with the isolation of the internal iliac artery, which should be medially tractioned, enabling the identification of

the bifurcation of the common iliac vein into the internal and external iliac vein. We then start the systematization of the approach with the dissection of the avascular space between the "V" shape formed by the umbilical artery and uterine artery, subsequently heading towards the sacrum. Next, we identify the rectovaginal fascia, being the first structure to be identified, extending from the rectovaginal space to the tendon arch. Behind this structure, we can find the coccygeal muscle and the sacrospinous ligament extending from the sciatic spine towards the sacrococcyx.

**Measurements and Main Results:** We conclude the systematization of the pelvic floor approach being able to safely perform the resection of the endometriotic nodules with intact innervation, tension-free muscles and greater damage control.

**Conclusion:** In summary this novel approach to the pelvic floor is thought to be a simpler and less risky alternative to treat low parametric injuries afflicting the sacrospinous ligament and the coccygeal muscle.

## Open Communications 17: Laparoscopy-Variety (3:15 PM — 4:15 PM)

## 4:01 PM

#### COVID19 Pandemic Impact on Same-Day Discharge Rates after Minimally Invasive Surgery for Endometrial Cancer

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**Study Objective:** To determine if the COVID19 pandemic increased the rate of same-day discharge (SDD) after minimally invasive surgery (MIS) for endometrial cancer.

**Design:** Retrospective cohort study of patients undergoing MIS hysterectomy for endometrial cancer for the six months before and after the COVID19 restrictions went into place on March 17, 2020.

Setting: Robotic or laparoscopic procedure in the low dorsal lithotomy position. Arms were tucked and padded at their sides.

**Patients or Participants:** 166 patients underwent a MIS procedure for the indication of endometrial cancer at a large, academic institution from September 1, 2019, through October 1, 2020. 80 patients prior to the implementation of the COVID19 restrictions and 86 patients after.

**Interventions:** COVID19 pandemic with visitor restrictions and hospital policy changes placed on March 17, 2020.

**Measurements and Main Results:** SDD rate was increased following the start of the COVID19 pandemic (40% vs 58%, p=0.02). There were no differences between the two groups in regard to operative time (p=0.07), estimated blood loss (EBL) (p=0.21), uterine weight (p= 0.12), age (p=0.06), BMI (p=0.42), or surgery start time (p=0.15). In a multivariable logistic regression model, subjects in the post COVID19 group had a 3.08 (95% CI: 1.40, 6.74, p=0.01) higher odds of SDD than those in the pre COVID19 group. There was no difference in 30-day readmission rates (7.5% vs 5.8%, p=0.66).

**Conclusion:** With no additional interventions from a surgical standpoint, the start of the COVID19 pandemic improved SDD rates. The reason for this is speculative but may be related to patient and physician desire to keep patients out of the hospital and may provide further evidence that subjective reasons lead to an increase in hospital length of stay.

# Open Communications 18: Laparoscopy-Variety (3:15 PM — 4:15 PM)

# 3:18 PM

Determents for Pelvic Organ Prolapse Recurrence in Women Undergoing Laparoscopic Sacrocolpopexy and Sacrohysteropexy

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