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11-1-2022

7972 Enhancing Laparoscopic Education with Use of LaparAssist, a Hands-Free Device Designed to Direct Learners on a Laparoscopic Monitor

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of hyperestrogenism on patients with atypical endometrial lesions. The combined approach confirmed as a safe and effective fertility-sparing approach. Promising pregnancy outcomes can be expected.

7954 Patient Experiences with a Multidisciplinary Fibroid Program

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Study Objective: Examine patient experience with fibroid management options before and after consultation at a multidisciplinary fibroid center.

Design: Prospective survey-based descriptive study.

Setting: Multidisciplinary (minimally invasive gynecology and interventional radiology) fibroid center New York, NY.

Patients or Participants: Patients who presented for initial consultation with our fibroid program from July 2021 through January 2022.

Interventions: Patients were offered same day office consultations with a minimally invasive gynecologic surgeon followed by a telemedicine visit with an interventional radiologist within 3 weeks of consult request. Collaborative discussions were held between providers regarding patient care. Patients were asked to complete the survey following both appointments. Data was collected regarding patient demographics, prior evaluation of fibroids, knowledge about treatment options, and overall experience.

Measurements and Main Results: A total of 102 patients completed the survey (response rate 77%). A majority (55.9%) had known about their fibroids for at least two years. Most patients sought out the fibroid program for a 2nd (28.4%), 3rd (22.5%) or 4th (7.8%) opinion. Notably, 35.3% of patients who had previously been seen by a gynecologist were not offered treatment. Of those who had been offered treatment, 24.5% were counseled on medical management with oral contraceptives, 28.4% on surgical options and 5.9% on uterine artery embolization. Nearly all patients (86.3%) endorsed that they would not have sought two separate consultations had it not been for the program. Patients were overall satisfied with their experience; with 95.1% reporting they were more knowledgeable about their options and none reporting the consults created more confusion for them.

Conclusion: Many patients with symptomatic uterine fibroids presenting for additional opinions have not been comprehensively counseled on fibroid management options. A collaborative approach to fibroid management helps to better educate patients about their treatment options, provides an opportunity to be thoroughly counseled by the specialists performing either surgical or interventional procedures, and increases patient satisfaction.

7955 The Adeno Study: Adenomyosis in Dutch Women and Its Effect of Neonatal and Obstetric Outcomes - a Retrospective Population-Based Study

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Study Objective: To retrospectively investigate prevalence of adverse obstetric and neonatal outcomes in women with histopathologically proven adenomyosis compared to the general (Dutch) population.

Design: Retrospective population-based cohort study.

Setting: Population-based national databases.

Patients or Participants: Women with registered pregnancy outcomes in the Dutch national Perined registry, who received a histopathological diagnosis of adenomyosis (post-hysterectomy) between 1995 to 2018, as registered in the Dutch national pathological registry, were included.

Pregnancy outcomes of 7,925 women with a histopathological diagnosis of adenomyosis were compared to 4,615,803 women without adenomyosis. Adjusted Odds Ratios (aOR, 95% CI) were calculated. Outcomes were corrected for: maternal age, parity, ethnicity, year of registered birth, induction of labor, hypertensive disorder in previous pregnancy, multiple gestation and low socioeconomic status.

Interventions: Hysterectomy.

Measurements and Main Results: Women with adenomyosis had an aOR of 1.370 (95% CI 1.25-1.498) for hypertensive disorders, an aOR of 1.373 (95% CI 1.248-1.510) for preeclampsia, and aOR of 1.15 (95% CI 1.067-1.248) for small-for-gestational-age. Women with adenomyosis had an aOR of 1.538 (95% CI 1.410-1.679) for emergency caesarean delivery, an aOR of 1.242 (95% CI 1.124-1.373) for failure to progress in labor, an aOR of 1.278 (95% CI 1.101-1.484) for placental retention and an aOR of 1.232 (95% CI 1.098-1.383) for postpartum hemorrhage. There was no significantly increased risk for HELLP, eclampsia, placental abruption, operative vaginal delivery or need for oxytocin stimulation.

Conclusion: This is the largest study up to now which investigates the impact of adenomyosis on obstetric outcomes and is the first study which uses the golden standard of adenomyosis diagnosis: histopathology. We confirm women with adenomyosis show an increased prevalence of a variety of adverse obstetric outcomes, specifically hypertensive disorders of pregnancy, small-for-gestational age, failure to progress in labor and placental retention. We conclude that uterine placental invasion and contractile function in labor may be impaired in women with adenomyosis.

7967 Hysteroscopic Subendometrial PRP Injection in Cases of Infertility

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Study Objective: To determine the efficacy of Hysteroscopic subendometrial Platelet Rich Plasma (PRP) injection in improving endometrial thickness and pregnancy rates in IVF cases.

Design: Case-control Study.

Setting: Patients had hysteroscopy under general anesthesia or office settings according to their preference, in the dorsal lithotomy position.

Patients or Participants: 51 patients with history of recurrent IVF failure or thin endometrium (<7mm).

Interventions: Hysteroscopic subendometrial injection of autologous PRP using a wallace needle through the hysteroscope's operating channel to inject the PRP beneath the superficial endometrium in novel technique.

Measurements and Main Results: Endometrial thickness was measured sequentially post-operative and pregnancy rates following embryo transfer recorded.

Conclusion: PRP injection significantly improves endometrial thickness, and more studies are needed to ascertain pregnancy rates and live birth rates.

7972 Enhancing Laparoscopic Education with Use of LaparAssist, a Hands-Free Device Designed to Direct Learners on a Laparoscopic Monitor

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Study Objective: To determine if LaparAssist, a wireless foot-pedal activated glasses-mounted laser pointing device, is beneficial to medical trainees and performs non-inferiorly to standard pointing devices.

Design: A prospective observational study was performed on academic personnel, with a comparative follow-up study utilizing OB/GYN residents. Two tasks were designed: a maze task to determine pointing accuracy, and a point task measuring time of completion.

Setting: Participants stood 15° offset from perpendicular to a monitor that was 145 cm tall and 120 cm away while using the devices. Testing was

performed in a prototyping lab and simulated operating room for academic personnel and residents, respectively.

Patients or Participants: Twenty-three academic personnel volunteered for the initial study. The follow-up comparative study utilized 10 resident volunteers. Participants took approximately 15 minutes to complete both tasks. Follow-up surveys were conducted.

Interventions: Participants were taken through a series of non-inferiority tests using LaparAssist, a laser pointer, and a computer mouse on a monitor. For the maze task, participants utilized each device to complete a simple maze. In the point task, participants pointed at randomly appearing dots.

Measurements and Main Results: For the maze task, participants were timed, and errors were recorded. Analysis demonstrated no significant difference in errors by the residents between LaparAssist and the laser pointer ($p=0.05$). For the point task, subjects were timed. Analysis demonstrated no significant difference in time by the residents between LaparAssist and a handheld laser or mouse. Overall, the residents performed the tasks faster than academic personnel. Survey results indicated no significant difference between devices in comfort and perceived performance for both academic personnel and residents.

Conclusion: LaparAssist allows laparoscopic surgeons to more clearly communicate with trainees without the use of occupied hands. Our data indicates LaparAssist can perform comparably to hand-controlled pointing devices.

7976 Vaginal Natural Orifice Transluminal Endoscopic Surgery (vNOTES) with a Retroverted Uterus: Should the Approach Change?

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Study Objective: To demonstrate techniques that improve visualization and operative field for the removal of fallopian tubes in patients with retroverted or enlarged uterus encountered during vaginal natural orifice transluminal endoscopic surgery (vNOTES).

Design: Video demonstration.

Setting: Tertiary care center.

Patients or Participants: A reproductive-age patient was seen in the office for surgical sterilization. She was deemed a good candidate for vNOTES as she had no prior abdominal surgery and a small uterus. However, upon entry into the abdomen, the uterus was found to be retroverted.

Interventions: Routinely, three instrument sleeves are utilized with the vaginal access point in order to use a laparoscopic camera, a grasping instrument, and an instrument that cauterizes and excises the fallopian tubes. For a retroverted uterus, strategic access point preparation and instrument positioning techniques can improve visualization, maximize the operative working diameter, and decrease instrument collision. The instrument sleeves are placed in an inverted triangle, with the grasping instrument in the ipsilateral side of the fallopian tube being excised and the 30-degree laparoscope in the contralateral sleeve. The excising instrument is placed in the most inferior, most medial sleeve, maximizing the operative field. A fourth instrument placed directly in the air-tight gel below the inferior sleeve can lift the uterus to improve visualization of the fallopian tubes.

Measurements and Main Results: Patient was discharged home on the same day. Two weeks post-operatively, there were no recovery complications.

Conclusion: The vNOTES procedure provides patients a minimally invasive option for surgical sterilization with fast recovery and negligible scarring. Surgeons may still consider a patient with a retroverted uterus a candidate for vNOTES by optimizing sleeve placement, instrument positioning, and utilizing a fourth instrument to lift the uterus and better visualize the operative field. This technique may also be useful to improve visualization of fallopian tubes in the setting of a bulky or enlarged uterus.

7984 Primary Hysteroscopic Treatment of First Trimester Miscarriage Using Resectoscope - a Pilot Study

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Study Objective: To determine the feasibility and safety of hysteroscopic resection using standard resectoscope for uterine evacuation of first-trimester miscarriage.

Design: A prospective feasibility study.

Setting: Academic, tertiary-care medical center.

Patients or Participants: Women diagnosed with early miscarriage up to 12 weeks from last menstrual period.

Interventions: Overall, in this pilot study, 15 women were recruited for hysteroscopic evacuation of the uterine cavity between April 2021 and October 2021. All procedures were performed under general anesthesia by Versapoint 2 Bipolar Resectoscope 24Fr (J&J, Germany).

Measurements and Main Results: Collected data, including demographic characteristics, pregnancy-sac size and location, length of procedure, as well as intra and postoperative adverse events, were recorded. The mean duration of the procedure was 14.3 ± 3.7 minutes. Complete evacuation was recorded in all cases, and no adverse events occurred during any procedure. Post-procedure follow-up was conducted by office hysteroscopy in 10 women and by ultrasonography in 5 women. In one case, retained products of conception were diagnosed in the office hysteroscopy and were removed using the "see-and-treat" technique without anesthesia. The diagnosis was confirmed pathologically.

Conclusion: Hysteroscopic evacuation using resectoscope for the treatment of early miscarriage is a safe and feasible technique. Randomized trials are needed to examine the efficacy of hysteroscopic treatment compared with traditional dilation and curettage.

7986 Laparoscopic Left Adnexal Cystectomy in a Pediatric Patient with Infected Ohvira

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Study Objective: Obstructed Hemivagina and Ipsilateral Renal Anomaly (OHVIRA) is an abnormality of Mullerian development typically diagnosed after menarche with painful menses due to the obstructed outflow of one hemivagina. Microperforations may occur in the vaginal septum which can lead to infected hematometocolpos, intermenstrual bleeding, and abnormal discharge.

Design: We present a video demonstrating the case of a twelve-year-old girl with history of renal anomaly and painful menses with intermenstrual bleeding and persistent discharge. Preoperative imaging suggested OHVIRA with an eight-centimeter adnexal cyst on preoperative imaging. Differential diagnosis of the adnexal cyst included tubo-ovarian abscess, ovarian or paratubal cyst, and ectopic ureter leading to a fluid collection.

Setting: Concurrent laparoscopic and vaginal surgery at an academic children's hospital medical center.

Patients or Participants: Twelve-year-old girl with history of renal anomaly and gynecologic symptoms.

Interventions: The vaginal septum was removed in the operating room, revealing purulent hematocolpos consistent with infection. Laparoscopy allowed for diagnosis of paratubal cyst with adnexal inflammation and concurrent cystectomy, in addition to permitting confirmation of uterine anatomy for future guidance.