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8777 Descriptive Postoperative Complications Following Robotic Sacrocolpoperineopexy in 1000+ Patients

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8772 The Impact of Acute Urinary Retention Volume on Postoperative Urinary Dysfunction Following Robotic Sacrocolpopexy

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Study Objective: Sacrocolpopexy (SCP) for pelvic organ prolapse is typically performed with a midurethral sling (MUS) to treat or prevent postoperative stress urinary incontinence (SUI). A known complication is the development of postoperative urinary dysfunction, namely obstructed voiding, chronic urinary retention (CUR) and eventual sling release. This study aims to investigate whether the degree of acute urinary retention (AUR) is predictive of longer-term sequelae.

Design: Retrospective case control study.

Setting: Academic-affiliated community hospital.

Patients or Participants: All patients (n=708) undergoing a robotic SCP with transobturator MUS placement by a single urogynecologist between January 2012 and March 2022 stratified by their post-void residual bladder volumes (PVRBV) were included in this study.

Interventions: Patients were grouped by their degree of PVRBV: ≤150mL (n=397), >150 and ≤300mL (n=111), >300 and ≤450mL (n=84), and >450mL (n=116).

Measurements and Main Results: Higher volumes of AUR had a statistically significant increase in the percentage chance risk of CUR. (6.3%, 16.2%, 10.7%, 14.7%, p<0.05). A non-statistically significant distribution was observed between PVRBV and requirement for eventual sling release (3%, 1.8%, 0%, 6%, p=0.08). There were no differences in other long term postoperative sequelae amongst variable degrees of acute PVRBV including urinary symptoms, need for postoperative medications or return to the emergency department or hospital readmissions. Patients with greater PVR volumes had lower body mass index (28.7, 27.7, 27.2, 26.8 kg/m², p<0.05). Other demographic variables were similar amongst groups.

Conclusion: Increasing BMI has a protective effect from developing CUR. Higher PVRBV in excess of 150mL were associated with a greater propensity for CUR. This had a trend toward requiring sling release and/or revision. Future studies are necessary to determine whether the degree of AUR is related to the procedure or pre-existing bladder dysfunction.

8776 Perioperative Outcomes of Robotic Versus Open Midline Specimen Extraction Fascial Site Closure

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Study Objective: Laparoscopic sacrocolpopexy (SCP) is typically performed to repair advanced stage pelvic organ prolapse. Surgeons often opt to perform a supracervical hysterectomy (SCH) rather than total during combination SCP to avoid mesh erosions/infections. Tissue extraction is accomplished by extending a midline port site and may be closed by either a traditionally open or intra-abdominal robotic technique. This study aims to evaluate the outcomes of these two closures.

Design: Retrospective cohort study.

Setting: Academic-affiliated community hospital.

Patients or Participants: All patients (n=183) undergoing a robotic-assisted SCH, SCP, and midurethral sling placement by a single

urogynecologist in which the uterus was extracted from an extended midline port between January 2021 and March 2022 were included in this study.

Interventions: Cases (n=105) of extraction sites closed via an intra-abdominal robotic approach were compared to controls (n=78) of a traditional open approach.

Measurements and Main Results: Cases and controls had similar operative times (251 vs 258 mins, p=0.35). Cases required less pain medication use in morphine milligram equivalents (MME) during the hospital stay (12.1 vs 18.4 MME, P<0.05). Body mass index (BMI) averages were also greater amongst cases (28.3 vs 26.3 kg/m², p<0.05). No difference was observed in other demographic data including age, race, and comorbid medical conditions. No statistical difference was noted comparing returns to the emergency department or hospital readmissions between groups.

Conclusion: Robotic and open fascial closure after tissue extraction requires similar operative times. Robotic closure has decreased pain requirements with similar complication profiles and was performed on patients with greater BMI reflecting surgeon bias for its use in obese patients. Surgeons should consider intra-abdominal robotic closure especially when patient body habitus makes secure fascial closure from an open approach more challenging.

8777 Descriptive Postoperative Complications Following Robotic Sacrocolpoperineopexy in 1000+ Patients

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Study Objective: Sacrocolpoperineopexy (SCPP) repairs multicompartamental pelvic organ prolapse (POP) and involves extensive dissection along the anterior and posterior vaginal length to a greater degree than sacrocolpopexy. Medical literature is lacking large-scale studies of the complication profile for SCPP. This study aims to offer a descriptive investigation of the intraoperative and postoperative complications amongst over 1000 cases of SCPP.

Design: Descriptive study.

Setting: Academic-affiliated community hospital.

Patients or Participants: All patients (n=1243) undergoing a robotic-assisted SCPP by a single urogynecologist between January 2012 and March 2022 were included in this study.

Interventions: Of all patients, 821 (66%) underwent a concomitant hysterectomy: 62% supracervical, 4.1% total, and 34% with prior hysterectomy and vaginal vault suspension. 1117 (90.2%) were performed without co-surgeons ie. sling placement by a urologist or hysterectomy by a gynecologist. 1145 (92.1%) had a concomitant anti-incontinence procedure, with 91.2% being a transobturator sling.

Measurements and Main Results: The median age of all patients was 66 years old, with an average BMI of 28.2 kg/m². Rate of intraoperative complication was 1.4% (n=15); blood transfusion (0.1%, n=1), and bladder (1%, n=11), ureteral (0%), or bowel injury (0.3%, n=3). 35.8% (n=371) required discharge with home catheterization. 5.7% (n=61) of all patients had a return to the emergency department (ED) within 90 days of surgery mainly for pain (n=15), nausea and vomiting (n=3), constipation (n=8), or urinary tract symptoms (n=18). 2.7% (n=29) required readmission, and of those, 17.2% (n=5) required re-operation if readmitted to the hospital: incisional hernia repair (n=2), drainage of abscess (n=2), and pulmonary embolism thrombectomy (n=1).

Conclusion: SCPP is a treatment for advanced POP that has low rates of intraoperative complications and generally uncomplicated postoperative recovery. This case series of over 1000 procedures demonstrates the safety of the surgery and low rates of postoperative ED visits and hospital readmission on a large scale.

8778 Laparoscopic Low Anterior Resection of Endometriosis Pelvic Mass with Side-to-End Colorectal Anastomosis

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Study Objective: To perform resection of a recto-vaginal endometriosis mass and end-to-side bowel resection with minimally invasive surgery.

Design: Case study.

Setting: General endotracheal anesthesia. Foley catheter in place. Patient in modified lithotomy with both arms tucked, all pressure points padded and all extremities in neutral position. The patient received preoperative antibiotics and sequential compression devices were placed. The abdomen was prepped and draped in the usual sterile fashion.

Patients or Participants: Patient with endometriosis involving the rectum and vagina desiring minimally invasive surgery.

Interventions: Laparoscopic low anterior resection with side-to-end colorectal anastomosis, trachelectomy, bilateral oophorectomy, lysis of adhesion, flexible sigmoidoscopy, cystoscopy.

Measurements and Main Results: surgery performed without complications; patient recovery was uncomplicated.

Conclusion: We show in this surgical video the possibility to resect a recto-vaginal endometriosis mass and to perform end-to-side bowel resection using minimally invasive surgery without intra-operative or post-operative complications.

8786 Teaching Principles of Electrosurgery Via

Simulation: Adverse Effects and Potential

Complications

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Study Objective: To demonstrate a hands-on approach to teaching complications of electrosurgery via simulation.

Design: N/A.

Setting: N/A.

Patients or Participants: OB/GYN Residents.

Interventions: N/A.

Measurements and Main Results: N/A.

Conclusion: Adverse effects and potential complications of electrosurgery can be effectively taught to OB/GYN surgical trainees using a low-cost meat model simulation

8787 Caring for Pediatric and Adolescent (PAG)

Population: Tips and Tricks for the on-Call

Gynecologist

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Study Objective: To provide an overview of key differences in surgical care of pediatric and adolescent gynecology (PAG) patients to generalists and MIGS surgeons.

Design: N/A.

Setting: N/A.

Patients or Participants: N/A.

Interventions: N/A.

Measurements and Main Results: N/A.

Conclusion: N/A.

8788 Effect of Endometriosis on Postoperative Outcomes after Hysterectomy Performed for Benign Gynecologic Disease

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Study Objective: Endometriosis affects 10% of reproductive aged women. Its impact on complications after gynecologic surgery is, however, not well known. This study aimed to investigate the effect of endometriosis on perioperative outcomes of patients undergoing hysterectomy for benign disease.

Design: The 2014-2019 American College of Surgeons National Surgical Quality Improvement Program (ACS-NSQIP) databases were used to select patients undergoing elective hysterectomy performed for benign indications. Propensity scores derived from logistic regression and inverse probability treatment weighting analysis were used to assemble weighted samples of patients with and without endometriosis. Primary outcomes included 30-day mortality, postoperative complications, and reoperations. Binary logistic regression was used to compare differences in the primary outcomes between patients with and without endometriosis.

Setting: N/A.

Patients or Participants: A total of 127,556 hysterectomy cases were identified. Of those, 19,618 (15.4%) had a diagnosis of endometriosis.

Interventions: N/A.

Measurements and Main Results: Patients with endometriosis were younger, had higher incidence of pelvic inflammatory disease and prior abdominal operations but lower prevalence of chronic comorbidities. The incidence of postoperative complications was higher in patients with endometriosis (9.3% vs. 8.4%; Odds ratio (OR) [95% CI], 1.12 [1.05-1.20]; $P=0.001$). However, the incidence of 30-day mortality (0.04% vs. 0.03%; OR [95% CI], 1.16 [0.38-3.52]; $P=0.789$) and reoperations (1.50% vs. 1.36%; OR [95% CI], 1.11 [0.92-1.33]; $P=0.287$) were not different in patients with and without endometriosis.

Conclusion: The rate of postoperative complications is higher in hysterectomies involving endometriosis compared to hysterectomies without endometriosis. Likely this is due to the anatomic distortion incurring increased surgical complexity. Patients and surgeons should be aware of this increased risk when planning surgery for suspected endometriosis.