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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/m^2, $p<0.05$). 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/m^2, $p<0.05$). 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 multicompartmental 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/m^2. 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).