

PREOPERATIVE INTERNATIONAL PROSTATE SYMPTOM SCORE (IPSS) PREDICTS THE PRESENCE OF AN INGUINAL HERNIA IN PATIENTS UNDERGOING ROBOTIC PROSTATECTOMY

Omar Soto-Avilés MD¹, Carolina Andrade-Geigel², Héctor López-Huertas MD¹, Ronald Cadillo-Chávez MD² and Ricardo Sánchez-Ortiz MD¹

¹University of Puerto Rico and Robotic Urology and Oncology Institute, San Juan, PR; ²Robotic Urology and Oncology Institute, San Juan, PR

Introduction and Objectives: While prior studies have shown that encountering an incidental inguinal hernia during robotic prostatectomy (RP) is not uncommon, none have identified preoperative variables that may predict which patients will require a concurrent hernia repair. We report our experience with simultaneous robotic prostatectomy and intraperitoneal inguinal hernia repair using prosthetic mesh.

Methods: Our cohort consisted of 453 consecutive patients who underwent RP by a single surgeon over a 4-year period. Inguinal hernia defects were identified once the bladder was dissected and were repaired with mesh by the same surgeon after the anastomosis. The mesh used was equal parts absorbable poliglecaprone-25 monofilament and non-absorbable polypropylene monofilament (UltraPro, Ethicon). Statistical analysis was performed with SPSS to ascertain which variables were predictive of a hernia.

Results: Inguinal hernias were encountered during RP in 8.7% (37/453) of patients. These were unilateral in 6.2% (28/453) and bilateral in 2% (9/453) for a total of 46 sides. Locations were right (43.3%), left (32.3%), and bilateral (24.3%); 56.7% were direct, 32.4% indirect, and combined in 10.9%. Only 50% (18/36) of men had hernias evident on their preoperative examination or staging studies. Patients with a preoperative IPSS ≥ 15 had a 21.4% chance of requiring a hernia repair compared with 4.4% in patients without voiding dysfunction ($p < 0.001$) (Odds ratio: 6.37, 95% Confidence Intervals 3.01 to 12.2). There were no statistically significant differences between groups with regards to prostate weight (44.4 grams in hernia group vs. 45.9, $p = 0.07$), Body-mass index (27.5 vs. 28.1), age (57.9 vs. 57.3 years), EBL (110 vs. 130 cc), transfusions (1/37 vs. 1/412, $p = 0.08$), OR time (183 vs. 182 min), length of stay (1.4 vs. 1.3 days), intraoperative, early, or late complications, history of diabetes, hypertension, or smoking. After a median follow-up of 18.2 months, there was 1 hernia recurrence (2.2%, 1/46) repaired with open surgery. There were no patients with mesh-associated neuralgic pain or erosion.

Conclusions: Independent of prostate size, men with preoperative voiding dysfunction have five times the risk of requiring a hernia repair at the time of robotic prostatectomy (21.4% vs. 4.4%). Given that 50% of these hernias are subclinical, patients with an IPSS ≥ 15 should be counseled regarding the potential need for a concurrent hernia repair and its potential complications.