

would likely decrease the risk of unnecessary anesthesia. For patients who cannot reliably strain their urine, reimaging with a low-dose CT pelvis should be seriously considered for those patients with distal ureteral calculi \leq 5mm in size.

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ENDOUROLOGY & LAPAROSCOPY

Natural orifice transluminal endoscopic radical prostatectomy: initial perioperative and pathologic results

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Objective: To describe the first clinical experience, pathologic, and perioperative outcomes of natural orifice transluminal endoscopic surgery (NOTES) radical prostatectomy. NOTES represents the evolution of minimally invasive surgery. The conceptual feasibility has been shown in careful laboratory and animal studies, but a scarcity of information regarding clinical applications exists.

Methods: After institutional review board approval, 2 patients agreed to undergo NOTES radical prostatectomy for localized prostate cancer. The prostate was radically resected using a 26F resectoscope, 550- μ m laser fiber, and holmium laser. The prostate was delivered into the bladder and removed at the conclusion of the procedure through a suprapubic cystotomy for histopathologic analysis. The vesicourethral anastomosis was completed using a cannula scope, urethral-vesical suturing device, and titanium knot applier. Cystograms were taken immediately postoperatively and at catheter removal.

Results: Both patients tolerated the procedure without operative complications. All intraoperative cystograms showed watertight anastomoses. The pathologic examination revealed Gleason score 3 + 3 and Stage pT2aNx-Mx for 1 patient and Gleason score 3 + 4 and Stage pT2cNxMx for 1 patient, with negative margins for both. No blood transfusions were required. Patient 2 experienced some left-sided gluteal and suprapubic pain postoperatively.

Conclusion: NOTES radical prostatectomy appears to be a safe and feasible option for the management of carefully selected, organ-confined prostate cancer. The perioperative and pathologic outcomes show promise with this new technique; however, the high standards of oncologic and functional outcomes demand close and longer follow-up before adoption into the surgical armamentarium can be recommended.

Editorial Comment

The authors must be congratulated for their pioneer work. The advancement of minimally invasive urological surgery has pushed the technology and surgical instruments industry to collaborate with surgeons allowing better care of our patients.

Although the idea of transurethral radical prostatectomy has been studied by others previously (Kavoussi et al.); this report of 2 patients with localized prostate cancer with negative margins using this novel NOTES approach may have been possible due to the great experience of the authors with laser prostate enucleation and new instrumentation for suturing endoscopically.

I am certain longer follow-up will determine the validity of this novel technique but undoubtedly, this innovating work has to be recognized as breaking ground.

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Comparison of Laparoendoscopic Single-site Donor Nephrectomy and Conventional Laparoscopic Donor Nephrectomy: Donor and Recipient Outcomes

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Objective: To present a comparison of perioperative donor outcomes and recipient graft function in a series of patients undergoing laparoendoscopic single-site donor nephrectomy (LESS-DN) versus conventional laparoscopic donor nephrectomy (LDN).

Methods: Data were collected for 50 consecutive LESS-DN patients and a matched cohort of 50 LDN patients. The donor outcomes analyzed included operative time, estimated blood loss, complications, visual analog pain scores, and recovery time. The recipient outcomes analyzed included serum creatinine at discharge and follow-up and the incidence of delayed graft function.

Results: The mean total operative time was shorter in the LDN group than in the LESS-DN group ($P < 0.0001$). Linear regression analysis of the LESS-DN operative times relative to case number showed a significant decrease in the operative time with increasing case number ($r(2) = 0.19$, $P = 0.002$). No statistically significant differences were found in estimated blood loss, warm ischemia time, length of stay, or visual analog pain scores between the 2 groups. However, the surgical incision was significantly smaller in the LESS-DN group ($P < 0.0001$). After discharge, the patient-reported time to complete recovery was faster in the LESS-DN group ($P = 0.01$). The incidence of complications was similar in both groups; however, major complications only occurred in the LDN group. No differences were found in the recipient serum creatinine values or the incidence of delayed graft function.

Conclusion: Our initial experience with LESS-DN is encouraging. This retrospective matched-pair comparison between LESS-DN and LDN suggests that the single-port approach might be associated with quicker convalescence. Longer operative times in the LESS-DN group could simply represent the learning curve of a novel procedure.