

showed in a randomized trial that a regimen of percussion, diuresis and inversion therapy in patients left with residual < 4 mm lower pole calyceal fragments after SWL resulted in an additional 40% of patients clearing fragments from the kidney compared with no further clearance in the observation group (1).

In the current study, Chiong and associates randomized patients with lower pole stones to undergo 4 formal sessions of percussion, diuresis and inversion therapy starting 1-2 weeks after SWL versus no additional therapy and found a significant improvement in stone free rates in the treated group compared with the control group (63% versus 35%). Although the mean stone size in the 2 groups was 1 cm in the control group and 0.8 cm in the treated group, patients with stones up to 2 cm in size were included, a group that has previously been shown to respond poorly to SWL (2). As such, this regimen offers promise for improving stone free rates in a group of patients who have historically done poorly with SWL. Perhaps combining these mechanical maneuvers with pharmacotherapy using potassium citrate, which has been shown in a randomized trial to improve clearance of residual fragments after SWL of lower pole stones (3), will further improve treatment outcomes in this problematic patient group.

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ENDOUROLOGY & LAPAROSCOPY

Laparoscopic rectovesical fistula repair

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Background and Purpose: Rectovesical fistula (RVF) is a rare complication of radical prostatectomy. A 62- year-old man with clinically localized prostate cancer underwent open radical prostatectomy that was complicated by rectal injury and subsequent RVF development. Conservative management failed, and the patient was referred for surgical correction.

Technique: The operative steps consisted of (1) cystoscopy, (2) RVF catheterization, (3) ureteral catheterization, (4) five-port transperitoneal laparoscopic approach, (5) cystotomy, (6) opening of the fistulous

tract, (7) dissection between the bladder and the rectum, (8) closure of the rectum, (9) interposition of omentum, (10) suprapubic cystostomy placement, (11) bladder closure, and (12) colostomy creation.

Results: The operative time was 240 minutes. The hospital stay was 3 days. The urethral catheter was kept indwelling for 4 days. At 8 weeks postoperatively, the suprapubic tube was removed and the colostomy reversed. At 1-month follow-up, the patient remains free of fistula recurrence.

Conclusion: Laparoscopic rectovesical fistula repair is feasible and represents an attractive alternative to the standard approaches.

Editorial Comment

Rectovesical fistula is a rare complication after radical prostatectomy but when it occurs, it is very frustrating for the patient and the surgeon involved. The authors describe a novel laparoscopic approach to a problem that traditionally has been managed with complex reconstructive open surgery. This manuscript demonstrates the universally well known attractive benefits of minimally surgery, including faster recovery and better cosmetic results.

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Outpatient laparoscopic pyeloplasty

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Objectives: To assess the feasibility of ambulatory laparoscopic pyeloplasty. Laparoscopic pyeloplasty aims to reproduce the excellent functional outcomes of open pyeloplasty while diminishing procedural morbidity.

Methods: Six patients fulfilled specific inclusion criteria for outpatient laparoscopic pyeloplasty: informed consent, body mass index of 40 kg/m² or less, primary ureteropelvic junction obstruction, uncomplicated laparoscopic surgery completed by 12:00 pm, and postoperative pain control by oral analgesics. All patients had a double-J ureteral stent placed cystoscopically before laparoscopic access. No drains were placed postoperatively.

Results: All 6 patients successfully underwent laparoscopic dismembered pyeloplasty (3 left, 3 right) using the retroperitoneal (n = 5) or transperitoneal (n = 1) approach. The average patient age was 22 years. The mean surgical time was 223 minutes (range 165 to 270), the mean blood loss was 82 mL (range 10 to 250), and the mean postoperative hospital stay was 359 minutes (range 226 to 424). Postoperative analgesia comprised a mean of 6 mg morphine sulfate and 32 mg of ketorolac. No complications or readmissions occurred postoperatively. Intravenous urography and Lasix technetium-99m mercaptoacetyl triglycine renal scans documented resolution of obstruction. With long-term follow-up (mean 38.4 months), no recurrences have developed.

Conclusions: We report our initial series of ambulatory laparoscopic pyeloplasty. In this well-selected patient population, outpatient pyeloplasty was feasible and safe.

Editorial Comment

Advancement in the area of laparoscopy allowed better and minimally invasive management of ureteropelvic junction obstruction, departing from the less cosmetic but highly successful open technique. Other less invasive surgical techniques (i.e.; retrograde and anterograde endopyelotomy and Acucise endopyelotomy) offered an attractive outpatient setting but the success rates remained less than optimal. This article reveals that we have not explored all the benefits of minimally invasive laparoscopic surgery with an important caveat demonstrating that great results and low morbidity can only be achieved in high volume and experienced centers in laparoscopic surgery.

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IMAGING

Use of extended pattern technique for initial prostate biopsy

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Purpose: An extended prostate biopsy schema has been advocated at initial prostate biopsy to decrease the rate of false-negative cancer cases. However, critics have raised concerns that this may lead to the greater detection of clinically insignificant cancers. We examined the impact of using an extended pattern schema on cancer detection and also on the finding of smaller and clinically insignificant cancer.

Materials and Methods: Clinical data, including patient age, race, prebiopsy prostate specific antigen (PSA), digital rectal examination, prostate volume, number of needle cores and biopsy findings were abstracted from the medical records of all patients who underwent prostate biopsy in a 5-year period. Extended pattern prostate biopsy was defined as more than 10 cores. Clinically insignificant cancer was defined as a maximal tumor dimension of 1.0 cm or less, Gleason sum 6 or less and organ confined disease at radical prostatectomy. Adjusted regression models were developed to assess the independent effects of using an extended biopsy pattern on the detection of cancer overall and on the detection of clinically insignificant cancer.

Results: A total of 740 men with a mean age of 62.6 years were referred for prostate biopsy. Median PSA was 5.7 ng/ml and prostate volume was 39.7 cc. The OR for detecting prostate cancer was 1.55 (95% CI 1.09 to 2.19) for the extended pattern compared with standard biopsy. Of the subset of 136 patients who underwent radical prostatectomy 12.6% had clinically insignificant cancer. However, in contrast to overall cancer detection, extended pattern prostate biopsy was not found to be associated with an increased risk of detecting smaller or clinically insignificant cancer. PSA density was the single parameter found to be independently associated with the detection of clinically insignificant cancer (95% CI 0.20 to 0.98).

Conclusions: Using an extended prostate biopsy pattern involving more than 10 cores increases the likelihood of detecting prostate cancer. A significant association between more needle cores at initial prostate biopsy and finding smaller and clinically insignificant cancer was not apparent.