after initial percutaneous access. The authors attribute their low infectious complication rate to pre-operative treatment of positive urine cultures, percutaneous access and collecting system drainage the day prior to PCNL and aggressive culture-specific intravenous antibiotics after drainage. However, despite their high stone free rate, recurrent stones occurred in 46% of patients within 36 months.

This study highlights the potential complications of treating stones in this patient population as well as the high rate of recurrence despite a stone free state. However, it is encouraging that with careful pre- and intra-operative measures, complication rates can be minimized. While the practice of routinely obtaining percutaneous access a day or more prior to the procedure has never been shown in controlled trials to reduce infectious complications, and I personally have not adopted this practice, it does allow renal pelvic urine to be assessed prior to initiating lengthy manipulation of the urinary tract. In addition, although the authors advocate oral antibiotics for 2 days prior to admission, I favor a more prolonged course of 1-2 weeks of culture specific antibiotics to assure at least superficial sterilization of the urinary tract.

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## ENDOUROLOGY & LAPAROSCOPY

### Use of a ureteral access sheath to facilitate removal of large stone burden during extracorporeal shock wave lithotripsy

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Large renal stone burdens within a nondilated collecting system in patients with a relative contraindication to percutaneous nephrolithotomy can be a challenging problem. We describe a novel technique using a ureteral access sheath combined with extracorporeal shock wave lithotripsy to facilitate passage of stone fragments in such patients.

**Editorial Comment**

A ureteral access sheath is a hollow sheath that is placed with an obturator over a wire into the ureter. After removing the obturator, the sheath allows rapid placement and removal of ureteroscopes and improves irrigant outflow. The internal diameter of the devices ranges from 9.5 to 16 F, with lengths from 20 to 55 cm. Although ureteral access sheaths have been available for many years, they did not become popular until some modifications by Applied Medical (Rancho Santa Margarita, CA, USA) made them easier to insert and more rigid. Further modifications by Applied and then others - there are now sheaths available from at least 3 other companies - have included additional kink resistance, hydrophilic coatings, extra channels for guidewires, and improved obturators. Many endourology experts have advocated their routine use in all flexible ureteroscopic procedures, to ease ureteroscope passage, minimize pressure in the upper tract, and facilitate rapid removal and re-insertion of the ureteroscope for fragment or biopsy retrieval. Others use them only for specific indications. I consider them to be most useful when there is a good reason to remove stone fragments rather than simply

fragmenting the stone ureteroscopically and depending on spontaneous fragment passage. This typically is the case when renal drainage is poor (i.e., very dependent and dilated lower pole) and even small fragments are unlikely to pass, or if the stone burden is very large and the sheer volume of fragments might be problematic. Okeke and associates found a novel use for a ureteral access sheath in the setting of large stone burden, in that they positioned the end sheath just inside the ureteropelvic junction to facilitate active irrigation of fragments during shock wave lithotripsy, with the end result being that many of the fragments washed out of the kidney during the procedure. Given the large stone burden, the stone free result in the patient were excellent. The operative time is not provided, although I imagine that the procedure was fairly tedious. I have used a similar technique during ureteroscopic treatment of large renal stones, in patients whom, for one reason or another, were not candidates for percutaneous stone extraction. In cases where active clearance of fragments is desired, a ureteral access sheath is a useful adjunct in endourological management.

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**Long-term results of laparoscopic retroperitoneal lymph node dissection: a single-center 10-year experience**

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*Urology 2004; 63: 550-5*

Objectives: To evaluate the feasibility, morbidity, and long-term oncologic efficacy of laparoscopic retroperitoneal lymph node dissection (L-RPLND) in patients with nonseminomatous germ cell tumor (NSGCT).

Methods: L-RPLND was performed 188 times in 185 patients; 114 procedures were performed for Stage I NSGCT and 6 procedures for tumor marker-negative clinical Stage IIA disease. In the case of positive lymph nodes, adjuvant cisplatin-based chemotherapy was administered. After chemotherapy, L-RPLND was performed for retroperitoneal Stage IIA (10 patients), IIB (43 patients), and IIC lesions (15 patients).

Results: The mean operative time was 256 minutes for Stage I and 243 minutes for Stage II; the conversion rate was 2.6%. The mean blood loss was 159 mL in patients with Stage I and 78 mL in those with Stage II disease. Active tumor was found in 19.5% of patients with Stage I lesions and in 50% of patients with tumor marker-negative clinical Stage IIA disease. After chemotherapy, active tumor was found in 1 patient with Stage IIC disease and mature teratoma in 38.2% of patients. The mean postoperative hospital stay for those with Stage I and II disease was 4.1 and 3.7 days, respectively. Antegrade ejaculation was preserved in 98.4% of patients. The mean follow-up was 53.7 months for those with Stage I and 57.6 months for those with Stage II disease. All but 6 patients have remained free of relapse, and no patient died of tumor progression.

Conclusions: The rate of tumor control after L-RPLND and the diagnostic accuracy of L-RPLND were equal to the open procedure, and the morbidity was significantly lower. Therefore, L-RPLND for Stage I and low-volume retroperitoneal Stage II disease can be performed at centers with experience in urologic laparoscopy and oncology.

**Editorial Comment**

With the recent explosion of interest in laparoscopic prostatectomy and laparoscopic partial nephrectomy, with virtually every paper stating that these procedures should be performed only by those with “advanced

laparoscopic experience," the challenge of laparoscopic retroperitoneal lymph node dissection (L-RPLND) is often overlooked. I agree with the authors that a left-sided L-RPLND for Stage I nonseminomatous germ cell tumor (NSGCT) is the best way to start off. The left-sided template is smaller, the aorta is more forgiving, and the midline does not need to be crossed. There is controversy about the right-sided template, however. For those who feel that the right-sided dissection should be carried all the way to the contralateral renal hilum, completing this dissection laparoscopically without repositioning is difficult. It would have been nice if the authors had given us data on operative time, complications, and conversions for right vs. left procedures - I would guess that the right-sided ones were more challenging and dangerous. Disagreements about extent of the template aside, the authors' data are very reassuring as to the completeness of the dissection for Stage I disease. Of 91 patients with negative dissections, only one suffered a retroperitoneal recurrence. This suggests that the dissection by the authors is thorough. Certainly, their data regarding complications and conversions are excellent. L-RPLND should be considered an excellent option when there is "advanced laparoscopic experience."

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## IMAGING

### Adrenal neoplasms: CT-guided radiofrequency ablation - preliminary results

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*Radiology 2004; 231: 225-30.*

Purpose: To evaluate initial experience with radiofrequency (RF) ablation of adrenal neoplasms.

Materials and Methods: Thirteen adrenal masses in 12 patients (bilateral metastases in one patient) were treated with computed tomography (CT)-guided percutaneous RF ablation. Eleven adrenal lesions were metastases (five from lung cancer, four from renal cell carcinoma, and two from melanoma); one lesion was a pheochromocytoma and one was an aldosteronoma. There were 10 men and two women (average age, 58 years; range, 40-77 years) in the study; average adrenal mass diameter was 3.9 cm (range, 1-8 cm). Average number of RF applications per adrenal mass was 2.7 (range, 1-5 applications); average time per application was 7.8 minutes (range, 4-13 minutes). An internally cooled single electrode was used in five sessions; an internally cooled cluster electrode was used in eight sessions.

Results: Average follow-up was 11.2 months (range, 1-46 months). Eleven of 13 lesions were treated successfully with RF ablation after one session. Successful treatment was defined as lack of enhancement of the treated region on follow-up CT images and resolution of the biochemical abnormality in two patients. In two patients with large adrenal lesions (4 and 8 cm in diameter), enhancement of residual tissue was observed after one treatment session; this finding was indicative of residual tumor. One patient with thrombocytopenia that resulted from chemotherapy had a small hematoma, but no transfusion was required. No patient developed hypertension during the RF application. No patient with metastases had recurrent tumor at the treated site, and this lack of recurrence indicated effective local control; 11 patients had progression of metastatic disease at extraadrenal sites.