

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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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.

Conclusion: Preliminary data suggest that CT-guided RF ablation is an effective technique for local control of adrenal neoplasms.

Editorial Comment

Radiofrequency (RF) thermal ablation is a minimally invasive technique for treating inoperable solid tumors. This technique has been mainly used to treat solid hepatic and renal tumors and bone lesions (particularly osteoid osteoma). More recently, lesions involving lung, breast and the adrenal gland have also been treated by this modality. Percutaneous, image-guided RF ablation is a safe and well-tolerated procedure but may eventually present variable degree of complication (bleeding, infection, tumor seeding, pneumothorax and non-targeted thermal damage).

In this paper the authors present a successful treatment of 11 of thirteen adrenal tumors (average diameter of 3.9 cm) treated with a CT-guided RF ablation. Eleven out of 13 adrenal masses were metastases, with 6 isolated to the adrenal gland and 5 associated with localized disease elsewhere that had been successfully controlled with chemotherapy, radiation therapy, and/or surgical resection. Criteria for successful treatment were based on the absence of residual CT-contrast enhancement of soft tissues component, no evidence of subsequent adrenal enlargement or recurrent biochemical activity. Six of the ten patients with an extraadrenal primary tumor subsequently died of metastatic disease to other sites. The average time of death was 8 months after the adrenal tumor treatment (range 3 - 16 months). The four remaining patients of the 10 with extraadrenal primary tumor had new metastatic disease in extraadrenal sites. This manuscript offers a promising technique with important results since no patient with metastases (11 patients) had recurrent tumor at the treated site, and this lack of recurrence indicated effective local control.

Although consensus indication of percutaneous RF ablation in oncology is not strictly defined, one should keep in mind that the use of these techniques for local cancer treatment should consider that a local disease control may or may not improve patients' survival. Long term follow-up and randomized prospective trials are required to evaluate survival impact, document long-term efficacy and to determine if percutaneous RF ablation can reduce the number or eliminate repeated surgical intervention in specific clinic scenarios.

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Arteriuoreteral fistulas: a clinical, diagnostic, and therapeutic dilemma

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Editorial Comment

Arteriuoreteral fistula is a rare entity and a potentially life-threatening cause of hematuria with a 23% mortality rate. Although rare, it is being diagnosed more frequently because of the increase of predisposing factors such as radiation therapy and major surgery in the pelvis, presence of previous vascular surgery and presence of double-J-stent (1,2). These patients usually present intermittent episodes of gross hematuria. Arteriuoreteral fis-

tula represents abnormal communications between a major artery and the mid or distal portion of the ureter. Frequently the fistula occurs between the external iliac artery and the ureter. This entity is a diagnostic challenge for the radiologist given the intermittent nature of the bleeding. Thus, various techniques have been used in attempt for its diagnosis: cystoscopy, intravenous urography, ureterography, abdominal and pelvic CT, renal arteriography, and selective iliac arteriography. Selective iliac arteriography although presents low sensitivity (less than 50%), is considered the most sensitive technique. The cause of false negative examination is due to the fact of examining the patient when the fistula is partially occluded by a thrombus (quiescent phase). True positive findings are arterial pseudoaneurysms at the point where the ureter crosses the iliac artery and gross extravasation of contrast material into the ureter. Classic treatment of this entity is based on open surgery, which is usually unsuccessful and frequently associated with increased morbidity and mortality. In patients explored surgically without a preoperative diagnosis, the mortality rate is 64% in comparison to 8%, when the correct diagnosis is made pre-operatively.

Option treatments are quite variable: nephrectomy or nephroureterectomy, ureteral reconstruction, ureterostomy (surgical or percutaneous) or pyelonephrostomy, ligation of the ureter, embolization of the renal artery, renal irradiation, and autotransplantation. Recently a sonographically guided percutaneous nephrostomy followed by antegrade insertion of multiple metallic coils into the ureteral lumen just proximal to the fistula was reported. Vascular surgical procedures includes local reconstruction (i.e., arteriorrhaphy, patch closure, interposition graft, bypass), ligation with or without extra anatomic bypass (if arterioureteral fistulas arise from either common or external iliac artery), and ligation of the internal iliac artery.

Recently successful endovascular treatment of arterioureteral fistula using graft covered stent have been described and it seems to be a promising alternative to surgical procedures because presents less morbidity and mortality. Long-term follow-up after this endovascular treatment technique is needed.

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UROGENITAL TRAUMA

Management of bulbous urethral disruption by blunt external trauma: the sooner, the better?

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Objectives: To investigate whether the incidence of urethral stricture is different according to the primary mode of management, we retrospectively reviewed the record of patients with bulbous urethral disruption by external blunt trauma.

Methods: A total of 95 patients with blunt bulbous urethral injuries were included in the study. Sixty-five underwent immediate urethral realignment and 30 underwent initial suprapubic tube placement followed