ENDOUROLOGY & LAPAROSCOPY

Renal artery pseudoaneurysm following laparoscopic partial nephrectomy

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Objectives: To present our experience with the management of renal artery pseudoaneurysms following laparoscopic partial nephrectomy (LPN).
Methods: Our bi-institutional LPN database of 259 patients from July 2001 to April 2008 was queried for patients diagnosed with a postoperative renal artery pseudoaneurysm. Demographic data, perioperative course, complications, and follow-up studies in identified subjects were analyzed. Postembolization success was defined as symptomatic relief, resolution of hematuria, and a stable hematocrit and serum creatinine.
Results: We identified 6 patients (2.3%) who were diagnosed with a renal artery pseudoaneurysm after LPN. The mean age of our cohort was 61.2 years (49-76), mean operative time was 208 minutes (140-265), and mean estimated blood loss was 408 mL (50-800). Patients presented at a mean of 12.6 days (5-23) after the initial surgery. Five patients had gross hematuria and a decreased hematocrit, with 1 patient presenting with clinical symptoms of hypovolemia. The sixth patient was incidentally diagnosed. The diagnosis of a renal artery pseudoaneurysm was confirmed in all cases by angiography. Selective angioembolization was successfully performed in all patients. At a median follow-up of 8.3 months all patients (100%) remained without any evidence of recurrence.
Conclusions: Although pseudoaneuryms are a rare postoperative complication of LPN, they are potentially life-threatening. Early identification and proper management can help reduce the potential morbidity associated with pseudoaneurysms. Our experience demonstrates the feasibility and supports the use of selective angioembolization as an excellent first-line option for patients who present with this form of delayed bleeding.

Editorial Comment

The authors should be congratulated for reviewing their experience of pseudoaneurysms following laparoscopic partial nephrectomy (LPN). In contrast to case reports describing this particular complication post LPN, this manuscript reviewed the incidence of pseudoaneurysms post LPN in a series of LPN. From a total of 259 LPNs performed in 81 months the authors identified 6 patients (2.3%) who were diagnosed with a renal artery pseudoaneurysm after LPN. The majority of patients presented with gross hematuria and a decreased hematocrit, with 1 patient presenting with clinical symptoms of hypovolemia. One patient was incidentally diagnosed. Their diagnosis was confirmed in all cases by angiography. Selective angioembolization was successfully performed in all patients. At a median follow-up of 8.3 months, all patients (100%) remained without any evidence of recurrence. Their conclusion was that pseudoaneurysms are a rare postoperative complication of LPN, but they are potentially life threatening. Early identification and proper management can help reduce the potential morbidity associated with pseudoaneurysms and selective angioembolization is an excellent first-line of treatment of patients who present with this form of delayed bleeding. It would be beneficial if we could predict the patients that would develop this type of complication, i.e.; localization of the tumor, size, anatomical characteristics, etc., so we could foresee and prevent the occurrence of postoperative bleeding due to a pseudo-aneurysm.

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Laparoscopic radical prostatectomy in renal transplant recipients

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Objectives: To report our experience with 9 consecutive laparoscopic radical prostatectomy (LRP) on renal transplant recipients (RTR) and to compare it with other LRPs performed during the same period by the same surgeons. Retropubic radical prostatectomy has widely been described in RTR, whereas LRP has rarely been studied.
Methods: Between January 2007 and December 2008, all clinical data from patients undergoing radical prostatectomy were prospectively collected in a database. The database was searched to find information of LRP on RTR. We compared RTR and other patients for all relevant clinical data and for surgical complications.
Results: A total of 9 LRP on RTR (5.8%) and other 164 LRP were performed. LRP on RTR were compared with other LRP. No statistically relevant difference was observed in patient characteristics, biopsy core pathologic analysis, prostate specimen pathologic analysis, and oncologic outcomes. Surgical procedure was also achieved under the same conditions in RTR than in other patients (surgical time, blood loss, transfusion rate, bladder injury). Rectal injury rate was significantly higher in RTR than in other patients (22.2% vs 1.8%, P = .022).
Conclusions: LRP in RTR is feasible. The procedure can be managed the same way as LRP on other patients, but special care must be taken to avoid rectal injury. In our experience, the dissection of the posterior side of the prostate was more difficult on RTR than on other patients.

Editorial Comment

The authors described a difficult procedure, that is laparoscopic radical prostatectomy (LRP) in a population that has a complex medical history. Moreover, the possible anatomical challenges may cause an increase in morbidity. When cadaveric grafts are used, the immune system may alter the course of wound healing and increase not only the morbidity but also the mortality due to postoperative complications.

I congratulate the authors for sharing their experience describing a significant increase in rectal injury due to the anatomical challenges due to prior renal transplantation, the million dollar question is whether these patients can better served by other methods of therapy and ablation, such as, cryoablation of the prostate under transrectal ultrasonography.

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IMAGING

Imaging in pediatric urinary tract infection: a 9-year local experience

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