

be performed. The aim of this retrospective study and systematic review was to investigate the necessity of this scan in clinical practice.

**Methods:** Post NU urinary catheters were removed day 10 after mitomycin instillation and cytograms were not routinely performed in our centre. Patient follow-up was clinical, radiological and cystoscopic. A systematic review (SR) was performed according to PRISMA guidelines to investigate the incidence of urinary leak on cystograms after NU bladder cuff excision and complication rates if one was not performed.

**Results:** Sixty-seven patients were included from this centre, no clinical, radiological or cystographic evidence of a persistent urinary leak (i.e. abscess or urinoma) or fistulae were noted. The SR revealed incidence of urine leak at postoperative day 7 on cystogram in 241 patients from 9 studies was 0.4% (n = 1). Of the cohort that did not perform a cystogram prior to catheter removal (n = 50, 5 studies) the complication rate was zero. Cystograms cost £250 in the UK and \$1200 in the USA with resource and time utilization, radiation exposure and possible complications.

**Conclusion:** It is safe to omit a cystogram prior to removal of urinary catheter after bladder cuff excision in patients undergoing NU.

### Dilemma in Diagnostics and Management of Suspected Local Recurrence Following Laparoscopic or Robotic Partial Nephrectomy for Renal Cell Carcinoma: A Single Surgeon Experience and Systematic Review

S.M. Croghan<sup>1</sup>, C. Albu<sup>1</sup>, D. McNicholas<sup>1</sup>, JSA Khan<sup>1</sup>, S. David<sup>1</sup>, N. Nabi<sup>1</sup>, M. Shelly<sup>2</sup>, F. Wallis<sup>2</sup>, S.K. Giri<sup>1</sup>

<sup>1</sup>Department of Urology, University Hospital Limerick, Dooradoyle, Co. Limerick, Ireland; <sup>2</sup>Department of Radiology, University Hospital Limerick, Dooradoyle, Co. Limerick, Ireland

**Introduction:** Local recurrence (LR) after partial nephrectomy (PN) for renal cancer (RC) is reported 1–10%.<sup>1,2,3</sup> Little evidence-based guidance exists to address diagnostic work-up, management and outcomes. Furthermore, there is little data on concordance between radiological recurrence and final histology. We report our experience with suspected LR following laparoscopic and robotic PN (LRPN) and present an update of review of the literature.

**Methods:** A retrospective review was undertaken of PNs performed 2013–2018 for RC by a single surgeon, to ascertain incidence and outcomes of radiologically-reported LR. We then performed a systematic review of MEDLINE, SCOPUS and EMBASE databases, using search terms ‘Local Recurrence’ and ‘Partial Nephrectomy.’

**Results:** Of 150 PN, 130 were LRPN. Radiological suspicion of LR on surveillance imaging was reported in 3 patients. All proceeded to minimally-invasive radical nephrectomy following multi-disciplinary discussion. In 3/3 (100%) the repeat histology was benign; all remain disease-free at mean 48 month follow-up. Literature search strategy produced 969 returns, of which all original articles addressing management of suspected LR were included. Management strategies included radical nephrectomy, PN, ablative therapy and active surveillance. Poor reporting of use of biopsy in diagnostics and location of suspected recurrence were noted. Reported risk factors for true LR include positive surgical margins, higher nephrometry score, multi-focality and pathological stage.

**Conclusions:** The management of suspected LR post LRPN is complex. Patients should be counselled as to the possibility of benign resection. Greater reporting and audit of suspected LR are essential to determine optimal diagnostic and management strategies.

#### Bibliography

1. Van Poppel H, Da Pozzo L, Albrecht W, *et al.* A prospective, randomised EORTC intergroup phase 3 study comparing the

oncologic outcome of elective nephron-sparing surgery and radical nephrectomy for low-stage renal cell carcinoma. *Eur Urol.* 2011; 59: 543–552.

2. Pierorazio PM, Johnson MH, Patel HD, *et al.* Management of Renal Masses and Localized Renal Cancer: Systematic Review and Meta-Analysis. *J Urol.* 2016; 196: 989–999.
3. Novick AC, Straffon RA. *J Urol.* Management of locally recurrent renal cell carcinoma after partial nephrectomy. *J Urol.* 1987 Sep; 138 (3):607–610.

### How to manage patients given a low PIRADSV2 score - outcomes from an Irish tertiary referral centre

N. O'Dwyer, L. McLoughlin, D. Galvin, G. Lennon, D. Quinlan, B. McGuire, R. Gibney, D. Moran, D. Mulvin  
Dept of Urology, St Vincent's university Hospital, Dublin 4

**Introduction:** The use of multi-parametric MRI plays a key role in the diagnosis and treatment algorithm for patients with suspected prostate cancer. This study analyzed patients given a low risk score via mp-MRI PIRADSV2 score, in order to highlight the key risk factors that may indicate the need for subsequent prostate biopsy. Furthermore the study looked at the use of PSA density as a risk-stratifying tool to identify patients that may require a prostate biopsy.

**Methods:** All patients given a mp-MRI PIRADSV2 score of 1 or 2 were reviewed over a 2-year period in a single tertiary referral centre. The parameters recorded were PSA at presentation, PSA at time of MRI, prostate volume and histology results.

**Results:** 220 patient results were reviewed following mp-MRI (PIRADSV2 score of 1 or 2). Mean patient age was 64.9 years. The mean PSA was 8.2 ng.

63 patients went on to have a prostate biopsy. 157 patients continued on PSA surveillance.

49% of the biopsy group had a rising PSA value vs. 34% in the non-biopsy group. 40% of the biopsy group had undergone a previous biopsy vs. 60% in the non-biopsy group. Finally 51% of the biopsy group had a PSA density >0.15 ng/ml/ml vs. 28% in the non-biopsy group (P = 0.01).

**Conclusion:** The threshold of PSA density of 0.15 ng/ml/ml has been used in centers across the world in combination with PIRADS score ≤ 3 to guide physicians as to who can avoid biopsy<sup>1</sup>. When faced with a patient given a PIRADS score of 2, this study has shown that biopsy of the lesion could potentially be avoided if a patient has a PSA density <0.15 ng/ml/ml, a previous negative TRUS biopsy or static PSA value.

1. Combination of prostate imaging reporting data system (PIRADS) score and PSA density predicts biopsy outcome in prostate biopsy naïve patients. Washino S *et al.* *British Journal of Urology International*, Vol 119, Issue 2. March 2016.

### Outcomes Following Second Kidney Transplant: Results from the Irish Kidney Transplant Programme

J.A. O'Kelly, A.A. Ferede, E. MacCraith, K.J. Breen, J. Forde, P. Mohan, R. Power, G. Smyth, D.M. Little  
Department of Transplant, Urology and Nephrology (TUN), National Kidney Transplant Service (NKTS), Beaumont Hospital, Dublin, Ireland

**Introduction:** For patients who have undergone primary kidney transplant (PKT) and returned to dialysis, second kidney transplantation (SKT) offers improved quality of life and survival advantages. However, SKT is associated with greater immunologic and non-immunologic risk factors. Despite these challenges, outcomes

following SKT are acceptable with reported 5-year graft survival of up to 86%. We report outcomes following SKT from the Irish Kidney Transplant Programme.

**Methods:** We identified all patients receiving SKT at a single transplant unit between January 1993 and August 2017 using a prospectively maintained database. Outcomes assessed included graft survival rates following SKT, incidence of acute rejection (AR) and delayed graft function (DGF). We assessed both donor and recipient risk factors for AR, DGF and long-term graft failure.

**Results:** A total of 394 SKT were carried out over the study period. Follow up data was complete for 98.7% of patients. Median follow-up was 155(13–309) months. At the end of the study period, 239/394 recipients had at least 10 years of follow up.

The 1-, 5- and 10-year death-censored graft survival rates following SKT were 93.7%, 86.7%, 74.7% respectively. An independent finding showed length of survival of primary graft <6 years was predictive of poor outcome with SKT (HR 0.6,  $p < 0.05$ ), subgroup analysis of this cohort is underway. As expected, episodes of AR (HR 1.6,  $p < 0.05$ ), DGF (HR 2.0,  $p < 0.05$ ) and HLA-DR MM (HR 1.7,  $p < 0.05$ ) at SKT were associated with reduced SKT graft survival.

**Conclusion:** We report the largest single centre experience of SKT outcomes. We have demonstrated that SKT can yield desirable outcomes for patients with a failed PKT. However, early PKT loss predicts a poorer outcome with sequential transplant.