

**South Thames Regional Meeting**

**Frimley Park Hospital**

**Thursday 10<sup>th</sup> November**

- 10.00 – 10.30 Welcome coffee
- 10.30 – 12.30 STC meeting
- 12.30 – 13.30 Lunch
- 13.30 – 13.45 Research Update
- 13.45 – 13.55 **Evaluating the role of contrast enhanced ultrasound in the assessment of complex renal lesions**  
Paul Hughes, Samer Jallad, Emma Simpson
- 13.55 – 14.05 **Evaluation of cystine crystalluria in the first void versus clinic urine specimens of cystinurics using different counting methods**  
Kathie Wong, Caroline Parady, Soma Pillay, Morloh Kabia, Ashish Chandra, Kay Thomas
- 14.05 – 14.15 **An audit of Prostate Cancer Active Surveillance practice within our Trust**  
Paul Hughes, James Brewin
- 14.15 – 14.25 **PSA doubling time and PSA velocity predict men with prostate cancer who will progress on Active Surveillance following disease restaging with transperineal template biopsies**  
Ayres B.E., Brousil P., Langley S., Montgomery B.S.I., Bott S.R.J.
- 14.25 – 14.35 **Early outcomes following primary focal HIFU for localised prostate cancer**  
Tim Nedas, Amr Emara, Louise Dickinson, Neil McCartan, Andrew Thrower, Delia Peppercorn, Hashim Ahmed, Mark Emberton, Richard Hindley
- 14.35 – 14.45 **Laparoscopic Transvesical Urological Procedures are safe and Feasible: Report of the first UK experience**  
Qteishat A, Rao AR, Brown CT, Grange P, Kooiman G
- 14.45 – 14.55 **How do you remove your memokaths?**  
Fernando A, Hutchinson S, Anson K

- 14.55 – 15.05 **Optimal follow-up arrangements for invasive squamous carcinoma of the penis**  
HM Alnajjar, MJA Perry, RW Rees, CM Corbishley, NA Watkin
- 15.05 – 15.30 Tea
- 15.35 – 15.45 **“Sand wedge” en-bloc resection of bladder tumours: evolution of the technique with further instrument modifications**  
Acher P, Chatterton K, Chandra A, Chappell B, Thomas K, O’Brien T
- 15.45 – 15.55 **Initial experience with robotic partial nephrectomy (RPN): a collaborative approach drawing on different backgrounds**  
Charlotte Oliver, Amit Patel, Samira Moutkane, Pardeep Kumar, Nick Hegarty, Gordon Kooiman, Tim O’Brien, Ben Challacombe
- 15.55 – 16.05 **Surgical Approach for Robotic Assisted Laparoscopic Partial Nephrectomy should be Tumour rather than Surgeon Dependant**  
Amr M Emara, Archana Fernando, Sashi S Kommu, Richard G Hindley\*, Neil J Barber
- 16.05 – 16.15 **No-Clamp, No-Stop Watch Pure Laparo Endoscopic Single-site Surgery (LESS) Partial Nephrectomy**  
Lynch M, Rao AR, Brown CT, Kooiman G, Grange PCR
- 16.15 – 16.25 **Mid-urethral tape insertion as a day case procedure**  
G Cheung, T Nitkunan, RM Walker
- 16.25 – 16.35 **Can presence of granuloma act as a marker of response to intravesical BCG in non-muscle invasive bladder cancer?**  
S Jallad, P Hughes, A Gupta, S Goubet, A Symes, P Thomas
- 16.35 – 16.45 **Strategies to reduce emergency admission after extracorporeal shockwave lithotripsy**  
Marco Bolgeri, Hussein Alnajjar, Liz Eversden, Stephen Gordon and Nicholas Watkin
- 16.45 – 16.55 **Evaluating the role of surgery for intracardiac renal tumour thrombus in the TKI era**  
Patel A, Chowdhury S, Thomas K, Austin C, O’Brien TS

## **Evaluating the role of contrast enhanced ultrasound in the assessment of complex renal lesions**

Paul Hughes<sup>1</sup>, Samer Jallad<sup>1</sup>, Emma Simpson<sup>2</sup>

1 - Department of Urology, Brighton and Sussex University Hospitals

2 - Department of Radiology, Brighton and Sussex University Hospitals

### **Introduction**

Although contrast enhanced computed tomography (CECT) remains the standard imaging modality for renal lesion characterisation, there are occasions where diagnostic uncertainty remains. Contrast enhanced ultrasound (CEUS) is a safe, affordable and non-ionising modality which can add diagnostic value in the assessment of these difficult cases. We describe a UK centre case series experience of this emerging radiological technique.

### **Material and Methods**

Between November 2010 – August 2011 patients in whom there was diagnostic uncertainty about equivocal renal lesions or complex cystic lesions underwent CEUS using sonovue microbubbles. We evaluate how the presence of enhancement influenced clinical management, along with histological correlation where surgery was performed.

### **Results**

21 patients had CEUS with a median age of 68 years (range 35-89 years) over this period following conventional US and or CT imaging, and in whom diagnostic uncertainty existed. Six were for complex cystic lesions, of which 3 demonstrated concerning enhancement. Thirteen cases had equivocal solid lesions; 9 were suggestive of renal cell carcinoma (RCC) of whom 5 underwent Nephrectomy. Three showed no enhancement and were reassured they were benign. Only in one case was the lesion still felt to be equivocal necessitating further imaging. Two cases were post cryo-therapy ablation, of which one showed recurrence not accessible on CECT. CEUS aided clinical decision making in 90% (19/21) of cases.

### **Conclusion**

CEUS is an important adjunct to conventional imaging in delineating the nature of complex solid and cystic renal lesions, particularly in those in whom nephrotoxic and iodine based contrast agents are contra-indicated. These results are comparable with recent studies in other international centres.

## **Evaluation of cystine crystalluria in the first void versus clinic urine specimens of cystinurics using different counting methods.**

Kathie Wong, Caroline Pardy, Soma Pillay, Morloh Kabia, Ashish Chandra, Kay Thomas

Guy's and St. Thomas' NHS Foundation Trust

### Introduction and objectives

Currently, with the exception of serial imaging, there is no reliable means of monitoring disease activity in cystinuria. We therefore investigated the value of measuring cystine crystalluria comparing first void and clinic specimens, and two different methods of counting the numbers of crystals present.

### Materials and methods

Patients attending our specialist cystinuria clinic provided first void and clinic urine specimens. All patients were imaged during the clinic to determine new stone formation. The number of cystine crystals present in each sample was measured using both a Malassez counting chamber and a standard cytospin method. For each counting method we then determined the association between the number of cystine crystals detected and presence of new stone formation for both first void and clinic specimens. This association was analyzed using a two-tailed Mann Whitney test.

### Results

49 paired first void and clinic urine specimens were provided by 43 patients attending our clinic over a year. There was no correlation between the number of cystine crystals and new stone formation in first void specimens using either the Malassez chamber ( $p = 0.428$ ), or cytospin method ( $p = 0.104$ ). However, there was a significant association between the number of cystine crystals measured in clinic specimens and new stone formation using the cytospin method ( $p = 0.016$ ) but not the Malassez chamber ( $p = 0.142$ ).

### Conclusion

Our data suggests that first void specimens may not reflect disease activity in cystinurics as accurately as clinic voids later in the day. Our study shows that the more conventional cytospin method may be more accurate than the Malassez counting chamber in measuring cystine crystalluria.

## **An audit of Prostate Cancer Active Surveillance practice within our Trust**

Paul Hughes, James Brewin

Brighton and Sussex University Hospitals

### **Introduction**

Distinguishing those men with clinically relevant cancers who may benefit from radical treatment, from those with low risk disease in whom potential over-treatment is a concern, remains a difficult task. Patients require accurate outcome data for all treatment modalities to be able to make a fully informed decision. Although national and international studies are beginning to offer this information, within our department there was no record of active surveillance outcomes to help guide patient choice. This audit reviews clinical practice within our trust and patient population demographics, in an effort to check compliance with network guidelines and more fully inform patients of expected outcomes if they choose active surveillance.

### **Methods**

Retrospective audit of all patients diagnosed with low risk prostate cancer discussed at specialist MDT (2008-2010). Adherence to enrolment criteria was assessed (PSA <10, Gleason pattern <3+4, PSAD<0.15, <T2b), along with subsequent PSA monitoring (3 monthly for 18 months) and timings of repeat prostate biopsies (at 18 months). A minimum of 18 months follow-up data was available for all patients.

### **Results**

123 patients were enrolled on active surveillance protocol, median age 67 (50-77).

- Compliance with inclusion criteria : Yes 92% (114); 7% (9) non-compliant with PSA >10; 3% (4) PSA >10 and PSA density >0.15

- Compliance with follow-up protocol and biopsy schedule: Yes 26% (33); Intervals  $\geq 4$  months 25% (31); Intervals  $\geq 4$  months and Repeat Biopsies >20 months 37% (46); No Repeat Biopsies 4% (5); 7% (8) Lost to follow-up

- Continuing on active surveillance after repeat biopsies: Yes 60% (74); Radiotherapy 20% (25); Prostatectomy 7% (9); Watchful waiting 4% (5); Hormones 1% (1);

Pending 1% (1), Lost to follow-up 7% (8)

### **Conclusions**

Vast majority of patients comply with inclusion criteria and remainder represent a clinical judgement about suitability. More concerning however is the failure to adhere to guidelines on follow-up protocols and timings of biopsy, which warrant review of practice and establishment of database of all enrolled patients.

## **PSA doubling time and PSA velocity predict men with prostate cancer who will progress on Active Surveillance following disease restaging with transperineal template biopsies**

Ayres B.E., Brousil P., Langley S., Montgomery B.S.I., Bott S.R.J.

Frimley Park Hospital

### **Introduction**

The optimal method of Active Surveillance (AS) remains unknown. We have previously shown about a third of patients are reclassified with more significant prostate cancer, unsuitable for AS, after initial restaging transperineal template biopsies (TTB). We assessed the role of PSA kinetics in the follow up of patients who remained on AS following their restaging TTB.

### **Methods**

All patients suitable for AS (age  $\leq 75$  yrs, PSA  $\leq 15$  ng/ml, Gleason  $\leq 6$ , clinical stage T1-2a,  $\leq 50\%$  cores positive,  $\leq 10$  mm cancer in a single core) were followed prospectively. All patients underwent an initial restaging TTB within a median of 12 months of diagnosis by TRUS biopsies.

### **Results**

Between May 2006 and December 2010, 67 men remained on AS after initial restaging TTB. 13 men later stopped AS, 9 following disease progression on further TTB, 3 following biochemical failure and 1 due to patient choice. 16 men have had repeat TTB and those that had disease progression (n=9) had a median PSA doubling time of 48.8 months (range 16-73) and a median PSA velocity of 1.37 ng/ml/year (0.85-2.7). Those who did not progress on repeat TTB (n=7) had PSA doubling time of 105 months (25-130) and PSA velocity of 0.48 ng/ml/year (-0.02-1.48).

### **Conclusions**

We have previously demonstrated that PSA kinetics do not predict men who fail AS at first restaging TTB. However, despite a relatively small cohort size, PSA kinetics appear to be useful in predicting men who progress on AS following initial restaging of their prostate cancer with TTB.

## **Early outcomes following primary focal HIFU for localised prostate cancer**

Tim Nedas, Amr Emara, Louise Dickinson, Neil McCartan, Andrew Thrower, Delia Peppercorn, Hashim Ahmed, Mark Emberton, Richard Hindley

### Introduction

With a desire to avoid overtreatment and improvements in imaging and focal ablative technologies, focal therapy can now be extended to the prostate gland. This potentially offers cancer control with a more favourable side effect profile compared to radical therapies. Phase I/II trials using high-intensity focused ultrasound (HIFU) have demonstrated high rates of genitourinary functional preservation and cancer control in the short-term. We present our Basingstoke experience.

### Methods

20 Men treated with localised prostate cancer (T1c-T2b, Gleason grade  $\leq 4+3$ , PSA  $<15$ ) underwent focal ablation HIFU treatment (Sonablate® 500) with suprapubic catheterisation. 6 patients were included in the Phase II prospective ethics-committee approved focal ablation trial. All patients underwent MP-MRI and template biopsies prior to treatment. Follow-up post treatment involved MRI, PSA and functional outcomes were assessed using validated patient questionnaires. Targeted biopsies of the treated area were performed in selected cases at 6 months.

### Results

Mean PSA prior to treatment was 6.9ug/L (range 2.4-10.7) and 60% had Gleason 6 disease. All patients underwent focal HIFU ablation without complication. The majority were discharged within 24 hours and all patients returned to normal urethral voiding within 19 days (median 8 days). There have been no fistula to date and 85% of patients had erections and all men were continent (pad-free) by 6 months. The average PSA at 3 months post treatment was 1.54ug/L (range 0.3-3.2). One patient underwent re-treatment with HIFU and three had residual clinically insignificant disease on biopsy and have continued with surveillance.

### Conclusions

Focal HIFU treatment is well tolerated and can be performed as a day-case. Our experience of focal ablation has been encouraging. The strategies for follow-up post treatment are similar to those recommended for patients on active surveillance. Further follow-up is required to assess whether these benefits extend into the medium and long term.

## **Laparoscopic Transvesical Urological Procedures are safe and Feasible: Report of the first UK experience**

Qteishat A, Rao AR, Brown CT, Grange P, Kooiman G  
Kings College Hospital NHS Foundation Trust, London, UK

### **Introduction**

A laparoscopic transvesical approach for bladder diverticulectomy and distal ureterectomy/reimplantation is novel with few reported cases. We would like to present the first UK experience using this technique.

### **Materials and Methods**

The bladder is insufflated with CO<sub>2</sub> either with a catheter or cystoscope to a pressure of 18mmHg. Two working 5mm ports plus either a 5mm or 11mm camera port is placed directly into the bladder under direct vision from the cystoscope. The bladder wall is anchored with percutaneous suspension sutures to prevent port slippage. The diverticulum/distal ureter is then incised and retrieved through its neck or intramural segment and excised from the extravesical infraperitoneal space. The excised tissue is removed transurethrally. The diverticulectomy defect is closed with interrupted 3/0 monocryl or the spatulated distal ureter reanastomosed with 3/0 vicryl over a 6F stent. A catheter is placed and removed after a cystogram on the 10th post operative day. A 12F perivesical drain is left insitu for 24Hrs.

### **Results**

Six patients underwent a laparoscopic transvesical bladder diverticulectomy and four underwent excision of the distal ureter for stricture disease (3) and malignancy (1). Mean age 42 (27-50), operative time 260min (210-330m in), blood loss < 50ml and hospital stay 1.8 days. One patient developed urinary retention and another had a UTI. At a mean follow up 14 months there have been no recurrences.

### **Conclusions**

Laparoscopic transvesical surgery is a safe and effective alternative to transperitoneal laparoscopic techniques for intravesical and lower ureteric pathology.



## **How do you remove your memokaths?**

Fernando A, Hutchinson S, Anson K  
St George's Hospital NHS Trust, London

### **Introduction**

The Memokath 051 is a thermo-expandable titanium-nickel spiral stent developed for long-term ureteral stenting. It is mainly used as an alternative in patients with incurable ureteric strictures. Although designed to be a "permanent" stent there are several indications for Memokath removal. These include stent occlusion, malposition and symptoms such as pain and recurrent infection. Removing the memokath is not always straightforward. We describe the success of a technique called 'The Hutch' manoeuvre in such cases.

### **Method**

Conventional removal involves attempted grabbing with ureteroscopic forceps. These often slip and a decent "purchase" cannot be achieved. In this situation 'The Hutch' was attempted. This technique involves the use of a balloon ureteral dilator inflated within the distal end of the Memokath under xray control. The balloon is then inflated to provide "purchase" and the whole assembly is pulled out together after irrigating with cold water to soften the metal.

### **Results**

This technique has been used successfully in 6 patients. There were no complications related to the procedure in any of the 6 cases.

### **Conclusion**

'The Hutch' is a safe technique that can be employed in cases where removal of the Memokath has failed using standard techniques.

## **Optimal follow-up arrangements for invasive squamous carcinoma of the penis**

HM Alnajjar, MJA Perry, RW Rees, CM Corbishley, NA Watkin

Penile Cancer Centre, St George's Healthcare NHS Trust

### **Introduction & Objectives**

Follow up arrangements for squamous cell carcinoma of the penis (SCCp) are generally based on small retrospective studies. EAU guidelines recommend close follow up for 5 years in all patients. We aimed to provide more stratified follow-up arrangements based on risk of recurrence derived from a large contemporary series of patients treated at a single supra-network centre.

### **Materials and Methods**

Prospective review of all newly diagnosed primary SCCp treated surgically from 2000-2011. Tumour recurrence was defined as local (penile), regional (inguinal), distant recurrence (pelvic nodes/metastatic) at least 3 months after definitive primary surgery. Inclusion criteria: all patients regardless of tumour grade who had penile surgery leaving no residual glanular epithelium, with clear local margins, fully staged regional nodes and pathological N stage pN0/pN1.

### **Results**

228 of 420 (54%) newly diagnosed SCCp patients met the inclusion criteria. All were fully staged with sentinel node biopsy or prophylactic node dissection and confirmed to have N0/N1 nodal status. In the first 12 months surveillance there were 5 local, 2 regional and 2 distant recurrences (3.9%).

2/228 developed late local recurrence (17 and 29 months). Both had G1T1 lesions locally excised. No patient had nodal or metastatic disease after 12 months. The remainder of the patients remained disease free at a mean of 44 months follow up.

### **Conclusion**

For patients who have penile surgery which removes all glanular epithelium and have been staged N0 or N1, there are few recurrences overall, and the majority occur within 12 months of primary treatment. We therefore recommend a maximum follow up of one disease-free year for this sub-group who represent a significant proportion (54%) of all patients with invasive cancer. This will reduce the burden of unproductive surveillance. All other patients should continue to be followed up five years.

## **“Sand wedge” en-bloc resection of bladder tumours: evolution of the technique with further instrument modifications.**

Acher P, Chatterton K, Chandra A, Chappell B, Thomas K, O’Brien T.

Guy’s & St Thomas’ NHS Foundation Trust

### Introduction

Standard endoscopic loop resection of bladder tumours does not conform to oncological principles of dissection through normal tissue with en-bloc removal of the tumour as a single specimen. A new endoscopic electrode that takes the place of a diathermy loop and inserts into a working element has been developed in conjunction with Storz (Germany) to allow en-bloc resection and minimize cell scatter.

### Methods

Suitable bladder tumours, i.e. those that appeared small enough for removal through a 24Ch resectoscope sheath, were managed by en-bloc resection. Two versions of the J-shaped electrode are available depending on the site within the bladder. Precise dissection is carried out around the tumour base and within the underlying muscle in apparently normal tissue planes. A single pathological specimen is thus achieved consisting of tumour and base with a rim of deeper and surrounding normal tissue. Data are collected in a prospective database.

### Results

Following from a series 17 patients treated with prototype versions, 9 have also been treated with the now commercially available electrode over the last year. All tumours were non-muscle invasive; 6 PUNLMP, 14 low grade pTa, 4 high grade pTa and 2 low grade T1. No bladder perforations have occurred and only one patient of 23 who have had three-month cystoscopic review has had recurrence.

### Conclusion

The “sand wedge” electrode allows safe en-bloc resection of non-muscle invasive bladder tumours whilst adhering to surgical oncology principles. The sand wedge can easily be added to the endoscopic quiver of loop, rollerball and Collin’s knife.

## **Initial experience with robotic partial nephrectomy (RPN): a collaborative approach drawing on different backgrounds.**

Charlotte Oliver, Amit Patel, Samira Moutkane, Pardeep Kumar, Nick Hegarty, Gordon Kooiman, Tim O'Brien, Ben Challacombe.

Departments of Urology, Guy's and St. Thomas NHS Foundation Trust and Kings College Hospital NHS Foudnation Trust

### Introduction

The surgical, nephrological and oncological results from laparoscopic nephron-sparing surgery are encouraging but concerns remain regarding the technical difficulty of intracorporeal suturing resulting in prolonged warm ischaemic times. Previous work has demonstrated that suturing with the da Vinci robotic system is easier compared with standard laparoscopy. At our institution we have drawn from our experience from open and laparoscopic PN, and robotic pelvic surgery to develop the RPN program. We report on the first 13 patients undergoing RPN.

### Patients and Methods

13 patients with exophytic masses had RPN from June 2010-September 2011. The principles of traditional open surgery were followed. The renal vessels were occluded with bulldog clamps and warm ischaemia used in all cases. Sliding clip renorrhaphy and Evicel (J&J) were used for hemostasis. A tumour base biopsy was taken at the deep resection margin.

### Results

7 men and 6 women with a median age 53 years (range 38-76). Median operative time and warm ischaemia time were 170 minutes (160-220) and 21 minutes (12-28) respectively. Estimated blood loss was 150mls (20-350) and median length of stay 5 days (3-9). There were 1 Clavien grade III (ureteric stent) and 2 grade 1 complications. Median tumour size was 24mms (6-60). Pathology revealed 8 clear cell carcinomas, 1 chromophobe, 1 papillary, 1 angiomyolipoma and 1 mature haematoma. 1 surgical margin was focally positive, however deep margin biopsies were clear.

### Conclusions

Robotic partial nephrectomy is a safe and low morbidity alternative to open partial nephrectomy in selected patients with small renal tumours.

## **Surgical Approach for Robotic Assisted Laparoscopic Partial Nephrectomy should be Tumour rather than Surgeon Dependant**

Amr M Emara, Archana Fernando, Sashi S Kommu, Richard G Hindley\*, Neil J Barber

Frimley Park Hospital NHS Foundation trust, \*Basingstoke & North Hampshire Foundation trust

### Introduction:

Partial nephrectomy is now considered the standard technique for the management of small renal tumours (< 4cm) either as an open, laparoscopic, or, more recently with the introduction of the da Vinci robot, Robotic Assisted Laparoscopic Partial Nephrectomy (RALPN). The anatomy of the mass lesion remains the most important factor in both choosing nephron sparing surgery over radical surgery and also in terms of selecting approach, be it open versus minimally invasive or transperitoneal versus extraperitoneal. Purpose: To review our experience in employing both the extraperitoneal and transperitoneal approach in RALPN.

### Patients and methods:

Over the last year we have completed 32 RALPN cases of which 26 were by the extraperitoneal approach (Group 1) and 6 were transperitoneal (group 2). Our preferred route was the extraperitoneal approach, with the transperitoneal approach reserved for those tumours located antero-medially. Intra and perioperative data was collected prospectively.

### Results:

Mean age was 61 years. Mean tumour size was 29.3 mm in group 1 versus 28.9 in group 2. Mean operative time was 154.3 & 196.7 min in Group 1 and 2 respectively ( $P < 0.05$ ). Mean blood loss was 34 & 166 mls in the two groups ( $p = 0.837$ ). Warm ischemia time was 25 & 30 min for both groups respectively ( $P = 0.1911$ ). One case in group 1 was converted to open partial nephrectomy and another in group 2 to Laparoscopic radical nephrectomy (both for uncontrolled bleeding). Median Clavien complication scale was 1 for both groups.

### Conclusion:

Both extra and transperitoneal approaches are feasible with the Da Vinci Robotic platform and had similar operative outcomes. Surgical approach for RALPN can be determined by tumour anatomy rather than surgeon's preference.

## **No-Clamp, No-Stop Watch Pure Laparo Endoscopic Single-site Surgery (LESS) Partial Nephrectomy**

Lynch M, Rao AR, Brown CT, Kooiman G, Grange PCR

Kings College Hospital NHS Foundation Trust, Denmark Hill, London, UK

### **Introduction and Objectives**

Clamping of the renal hilum during partial nephrectomy causing renal ischaemia is detrimental to the future function of the kidney. We report our series of pure LESS partial nephrectomy using a no clamp technique.

### **Methods**

Six patients with low BMI and no previous abdominal surgery underwent the technique. 3D CT reconstruction was used pre-operatively to identify the polar and segmental arterial anatomy. A Quad/Triport (Olympus™) transperitoneal umbilical access device was used along with a flexible tip HD camera. Dissection was carried out using regular straight laparoscopic instruments and a long bariatric curved suction device to avoid instrument clashes. Intra-hilar dissection was carried out to expose vessels supplying the target area which were suture ligated. Partial nephrectomy was then carried using the Harmonic ACE™. Methylene blue was injected to identify significant breaches in the collecting system via a ureteric catheter. The kidney was sutured to control haemorrhage and urine leaks using our innovative single port spaghetti knot technique.

### **Results**

Mean age 51 years (24-76), warm ischaemia time 0 mins, operation time 305 mins (180-540), blood loss 550ml (250-2000), length of stay 5 days (4-8), there were no post-operative complications and no blood transfusions were given. None of the patients had more than a 20 mL/min change in their post operative GFR. 3 of the patients had RCC with negative margins, the others were benign.

### **Conclusion**

No clamp LESS partial nephrectomy is feasible in selected patients although the procedure is technically demanding and prolonged compared to standard multi-port laparoscopic partial nephrectomy.

## **Mid-urethral tape insertion as a day case procedure**

G Cheung, T Nitkunan, RM Walker

Urology Department, Epsom & St Helier NHS Trust, Surrey, UK

### **Introduction**

The British Association of Day Surgery (BADS) recommends that 80% of operations for female incontinence are carried out as day-cases.

The aim of this study was to determine length of stay for our mid-urethral tape procedures, implement change and to re-audit to ensure that same-day discharge was being delivered with acceptable results.

### **Methods**

Length of stay and complications were collated retrospectively on the forty-nine females who had had mid-urethral tape insertion between December 2009 and November 2010 (Group 1). Recommendations were implemented to decrease length of stay. Patients were then prospectively re-audited for six months, with 22 patients in this group (Group 2).

### **Results**

The initial mean length of stay was 31.6 hours (Group 1). The following recommendations were made to reduce length of stay – list case as first on theatre list, trial without catheter (TWOC) on the same day, and patients and nursing staff were informed that the aim was for same-day discharge.

Following these recommendations, length of stay was reduced to 22.8 hours (Group 2).

There was one intra-operative bladder perforation in each group. 22.7% (5/22) of patients in Group 2 required re-catheterisation prior to discharge (0% in Group 1). All were successfully TWOC'd one week later.

### **Conclusions**

Mid-urethral tape insertion can be performed as a day-case procedure. Patients need to be counselled about a 22.7% chance of re-catheterisation due to transient urinary retention.

## **Can presence of granuloma act as a marker of response to intravesical BCG in non-muscle invasive bladder cancer?**

S Jallad<sup>1</sup>, P Hughes<sup>1</sup>, A Gupta<sup>1</sup>, S Goubet<sup>2</sup>, A Symes<sup>1</sup>, P Thomas<sup>1</sup>

1 - Urology Department, Brighton and Sussex University Hospitals, Brighton, UK

2 - Clinical Investigation and Research Unit, Royal Sussex County Hospital, Brighton, UK

### **Introduction:**

The mechanism by which intravesical Bacillus Calmette-Guerin (BCG) exhibits its anti-tumour activity remains poorly understood. Markers for response have been evaluated, but until now no specific markers for response to intravesical BCG have been identified. There is conflicting evidence suggesting that the presence of granulomata in histology samples can act as a marker of response.

### **Materials and Methods:**

194 patients with non-muscle invasive bladder cancer (NMIBC) treated with intravesical BCG over a 5 year period were identified. The presence of granulomata and/or inflammation on histopathology review was correlated with disease recurrence and progression, with survival analysis performed using the Kaplan-Meier method.

### **Results:**

Granulomata were identified in 50 patients and inflammation in 111. 14 patients had no evidence of either, and tissue was unavailable in 19 patients, who were subsequently excluded.

The median recurrence free survival was significantly higher in the granuloma group, 60.2 months (95% CI: 54.3-66.1), than in the inflammation group (46.8 months, 95% CI: 40.9-52.6.  $P=0.003$ ) and the normal histology group (20.2 months, 95% CI 6.7-33.6.  $P<0.0001$ ).

The progression free survival was higher in the granuloma group (65.5 months, 95% CI: 62.2-68.8.  $P<0.0001$ ) and inflammation group (64 months, 95% CI; 60.1-67.9.  $P<0.0001$ ) in comparison with the normal histology (24.1 months, 95% CI; 9.9-38.2).

### **Conclusion:**

The presence of inflammation and specifically granuloma in histology samples following intravesical BCG for NMIBC could act as a marker of response. In the absence of inflammation or granuloma, the risk of recurrence and progression seems higher, perhaps necessitating a closer surveillance policy.



## **Strategies to reduce emergency admission after extracorporeal shockwave lithotripsy.**

Marco Bolgeri, Hussein Alnajjar, Liz Eversden, Stephen Gordon and Nicholas Watkin

Epsom and St. Helier NHS trust

### Introduction

Pain, haematuria and ureteric colic after extracorporeal shockwave lithotripsy (ESWL) for urolithiasis can lead to emergency consultations and admission to hospital.

In a previous audit we reported that 5.6% of treatments resulted in attendance to the emergency department and 3.2% in readmission, despite only 1.2% requiring intervention. We prospectively re-audited emergency attendance and readmissions after implementation of a flowchart with advice for patients to follow after their treatment.

### Methods

Between September 2010 and February 2011, patients were handed an information sheet with a flowchart on how to manage pain/colic, haematuria and systemic illness post-ESWL. Complication and admission rates were recorded prospectively. Results were compared with the previous retrospective audit using a two sample z-test for proportions.

### Results

214 ESWL treatment episodes in 158 patients were included in the prospective audit. In 82.7% of cases, patients developed at least one symptom, most commonly haematuria (68%) and renal/ureteric pain (47%).

Emergency attendance (3.6% vs 5.6%,  $p=0.2$ ) and admission rates (2.7% vs 3.2%,  $p=0.6$ ) did not change significantly, however more patients who used the flowchart asked for medical advice ( $p<0.001$ ).

No stented patient sought advice in either audit.

### Conclusions

Implementation of a flowchart for patients and improving post-treatment advice may not reduce re-attendance and admission rates post-ESWL.

There may be a finite rate of complications (around 5%) that cannot be avoided in non-stented outpatient-delivered ESWL. This evidence should be used in consent and post-treatment advice for patients. It may also have relevance in health care systems where readmission results in a financial penalty.

## Evaluating the role of surgery for intracardiac renal tumour thrombus in the TKI era

Patel A, Chowdhury S, Thomas K, Austin C, O'Brien TS

Guy's and St Thomas' NHS Foundation Trust

### Introduction

Propagation of renal tumour thrombus into the heart presents a huge challenge. Advances in surgical technique and systemic therapy demand constant re-evaluation of the role of surgery performed both with curative intent and in cytoreductive settings.

### Methods

19 patients were treated between 12/11-07/11. Operations performed with cardiopulmonary bypass and hypothermic circulatory arrest. No patients pre-treated with chemotherapy.

Indications: curative intent(n=9); cytoreductive(n=9); recurrence(n=1). In 9 thrombus was asymptomatic; n=5 leg swelling; n=2 Budd-Chiari syndrome; n=2 other.

### Results:

Median age 69 years(50-78). Median ECOG status = 3.

2/19(11%) in-hospital deaths post surgery.

Median operation time was 300mins; blood loss 3000mls (range700-4900); circulatory arrest time 23mins. Complications: 5 reoperations (n=4 bleeding, n=1 gastric perforation); Other : Clavien 2 n=7, Clavien 4 n=5.

Median tumour size: 110mms. Histology: 16=clear cell carcinoma, 1=papillary, 1=neuroendocrine and 1=leiomyosarcoma. Median Fuhrman grade 3.

1 patient lost to follow-up. Cumulative overall survival at 6, 12 and 24 months is 60%, 53% and 33%. 1 year survival with curative intent was 83% and in cytoreductive 44%.

3/9 treated with curative intent remain alive and disease free. 6/9 developed metastasis of which 3 received TKI's.

In the cytoreductive setting :1/9 patients remain alive and 5/9 patients received TKI's.

11 patients didn't receive chemotherapy: n=4 death within 2/12 of surgery; n=3 poor performance status; n=3 disease free; n=1 resection of metastasis and remains stable.

### Conclusions

Current perioperative mortality is low considering the surgery undertaken but morbidity remains considerable. 50% survive beyond one year but in 1/3rd TKI's are ultimately never utilised.