South Thames Urology Regional Meeting
3rd November 2016

Sherman Education Centre, Guy’s Hospital, London

Programme Outline

10:00-12:00 South Thames deanery meeting
KSS deanery meeting

12:30-13:45 Lunch

13:45-15:10 Academic Session 1 – Cancer and Robotics
(paper presentations)

15:10-16:00 Tea and coffee break

16:00-17:00 Academic Session 2 – Benign Urology
(paper presentations)

17:00-17:15 Final remarks; Prize presentation

17:30 Drinks and Food, The George Inn
Session 1 – Cancer and Robotics

13:45 Introduction

14:00 Factors influencing the length of hospital stay after robotic radical cystectomy: Exploring perioperative care pathway after minimal invasive approach

Dimitrios Moschonas, Ricardo Soares, Annelisse Ashton, Jamie Lindsay, Lee Kelliher, Chris Jones, Hugh Mostafid, Simon Woodhams, Michael Swinn, Matthew Perry, Krishna Patil

Royal Surrey County Hospital

14:10 Can we challenge the norm of routine post-cystectomy surveillance with imaging?

Kawa Omar, Martina Smekal, Brian Parsons, Rajesh Nair, Ramesh Thurairaja, Shamim Khan

Guy’s and St. Thomas’ NHS Foundation Trust

14:20 What Parameters Affect Continence after Radical Prostatectomy?

I Rudd, P Penkoff, J Pain, B Eddy

East Kent Hospitals University NHS Foundation Trust

14:30 Audit of Management of Stable Prostate Cancer Patients

Andrea Tay, Pieter Le Roux

Epson & St Helier University Hospitals

14:40 Post Prostatectomy Incontinence Surgery: Early outcomes from a new service for the region

Manoj Ravindraanandan, Elaine Hazel, Karen Briggs, Sachin Malde, Claire Taylor, Evangelos Zacharakis, Arun Sahai

Guy’s and St Thomas' NHS Foundation Trust

14:50 Robotic-assisted bladder diverticulectomy: point of technique to identify the diverticulum

Annelisse Ashton, Jamie Lindsay, Ricardo Soares, Dimitris Moschonas, Krishna Patil

Royal Surrey County Hospital
15:00 **Robotic-Assisted Ureteral Reimplantation – Our Experience**  
James JY Chong, Peter Penkoff, Julie Pain, Elizabeth Osinibi, Mark Wright, Ben Eddy  
Department of Urology, Kent and Canterbury Hospital, East Kent Hospitals University  
NHS Foundation Trust and Bristol Urological Institute, Southmead Hospital, North Bristol  
NHS Trust

15:10 **Coffee**

**Session 2 – Benign Urology**

16:00 **Management of vesicovaginal fistula: Outcomes and future recommendations**  
H Jenkins, S Kulendran, S Malde, C Kelleher, A Sahai, MS Khan  
Department of Urology & Urogynaecology, Guy’s and St Thomas’ NHS Trust & King’s Health Partners

16:10 **Improving the documentation of flexible cystoscopy notes: closed loop audit**  
Ola Blach, Ahmed Ali, Jie-Ying Kow, Simon Bott  
Frimley Park Hospital

16:20 **Acute Testicular Torsion - Auditing the Length of Time from A+E Presentation to Scrotal Exploration**  
Jamie Lindsay, Annelisse Ashton, Ricardo Soares  
Royal Country Surrey Hospital

16:30 **Dispelling the myth of the Holep Learning Curve**  
Mukhtar S., Whiting D., Henderson A.L., Cynk M  
Maidstone and Tunbridge Wells NHS Trust

16:40 **The Virtual Stone Clinic – The Future of Stone Management in the NHS?**  
Smith T, Blach O, Baker S and Symes A  
Brighton

16:50 **MicroTeSE: The Gold Standard for Non-Obstructive Azoospermia**  
J Lee & A Grewal, P Sangster¹, Y Dajani², K Ahmed¹, K Briggs¹, Y Khalaf², Y Koepika²,  
M Shabbir¹  
¹ Andrology & Genito-Urethral Reconstructive Urology Team & ² Assisted Conception  
Unit, Guy’s and St. Thomas’ NHS Foundation Trust
Title of presentation
Factors influencing the length of hospital stay after robotic radical cystectomy: Exploring perioperative care pathway after minimal invasive approach

Authors
Dimitrios Moschonas, Ricardo Soares, Annelisse Ashton, Jamie Lindsay, Lee Kelliher, Chris Jones, Hugh Mostafid, Simon Woodhams, Michael Swinn, Matthew Perry, Krishna Patil

Institution
Royal Surrey County Hospital

Presenting author
Dimitrios Moschonas

Abstract
Introduction: Radical cystectomy, the treatment of choice for muscle invasive disease, carries a particularly high risk of morbidity and mortality, as well as long hospital stay and readmissions. Our aim was to evaluate the impact of clinical and perioperative factors on length of stay (LOS).

Patients and methods: Since the establishment of a new regional tertiary bladder cancer service in April 2013, 150 (124 male and 26 female) patients underwent robotic assisted radical cystectomy. Retrospective analysis of demographic, operative and perioperative data was performed and predictors of LOS were assessed.

Results: Median length of stay was 5 days (range: 3-28 days) and 90 days readmission rate was 16.6%. Female gender (p=0.015), BMI ≥ 30 (p=0.028), ASA score > 2 (p=0.008) and major (Clavien-grade 3 or greater) complication (p<0.001) were associated with a LOS >5 days whereas age, preoperative cardiopulmonary exercise testing (CPET) anaerobic threshold, intraoperative blood loss, operating time, type of intra- or extracorporeal diversion and neoadjuvant chemotherapy did not affect hospital stay.

Conclusions: A comprehensive high volume bladder cancer centre combining minimally invasive surgery with multimodal enhanced recovery program confers optimal oncologic outcomes reducing hospital stay compared to national standards without an increase in neither complication nor readmission rates. Female, obese and unfit patients should receive preoperative counselling so as to optimise their physical condition through prehabilitation program and closer perioperative monitoring. Poor cardiorespiratory fitness as assessed by CPET does not predict longer hospital stay whilst neoadjuvant chemotherapy and minimal invasive intracorporeal diversion do not seem to affect outcomes.
Title of presentation
Can we challenge the norm of routine post-cystectomy surveillance with imaging?

Authors
Kawa Omar, Martina Smekal, Brian Parsons, Rajesh Nair, Ramesh Thurairaja, Shamim Khan

Institution
Guy’s and St. Thomas’ NHS Foundation Trust

Presenting author
Mr Kawa Omar

Abstract

Objective:
To assess if surveillance CT scan improves survival in patients with recurrence post radical cystectomy for bladder cancer.

Materials and Methods:
A retrospective analysis of prospectively collected data between 2003-September 2016 was conducted. Only patients who underwent radical cystectomy with curative intent and confirmed transitional cell carcinoma after cystectomy were included.

A total of 404 patients met the inclusion criteria. They had follow up CT scans of chest and CT-urograms tailored according to the final TNM staging. Some patients had CT scans for symptoms suggestive of recurrence before the routine follow up scans.

Results:
405 patients (male 311, female 94) with a median age of 68 years (range 35-83) were followed up for a median period of 28.5 months (range 1-154). Post-operative histology was reported as T0 (n= 67), Tis (n=68), Ta (Ta=18) Ta+CIS (n=12), T1 (n=47), T2 (n=52), T3 (n=68) T4 (n=9). A further 63 patients had node positive disease (pTxN+ve). A total of 120 (29.6%) developed recurrence. 61 were detected on surveillance CT and 59 on CT scans guided by symptoms. Median time to recurrence in the surveillance group was 11 months (range 3-42) compared to 14 months (range 1-88) for recurrences detected on CT scans guided by symptoms. 49/61 patients with recurrence detected on surveillance CT died from disease progression and the median survival was 13 months. In the symptomatic group 52/59 patients died from disease progression with a median survival of 4 months after diagnosis.

Survival curve from recurrence between the two groups were compared using Log rank test. The difference in survival between the two groups was statistically significant (P value 0.0005) in favour of the recurrences detected on CT surveillance.

Conclusion:
Cancer specific survival is longer in patients with recurrent disease detected on surveillance CT scans compared to patients diagnosed following cross sectional imaging performed for symptoms. This justifies the use CT surveillance protocols following radical cystectomy.
Title of presentation
What Parameters Affect Continence after Radical Prostatectomy?

Authors
I Rudd, P Penkoff, J Pain, B Eddy

Institution
East Kent Hospitals University NHS Foundation Trust

Presenting author
Ian Rudd

Abstract
Introduction
Urinary incontinence (UI) is one of the most problematic complications of radical prostatectomy (RP). A number of factors have been associated with UI outcomes after RP including age, BMI, prostate size, pre-existing UI, previous prostate surgery, comorbidities, preservation of the neurovascular bundles and bladder neck sparing procedures.

Patients and Methods
We examined a prospectively collected single surgeon database of 605 consecutive robotic assisted laparoscopic prostatectomies. UI was assessed at 6 weeks, 3, 6, 12, 18 and 24 months by quantification of pad usage and International Consultation on Incontinence Questionnaires (ICIQ). UI outcomes were analysed in relation to age, prostate size, BMI, preservation of the neurovascular bundles, bladder neck sparing procedures, previous TURP, extended lymph node dissections, training cases and surgeon experience.

Results
Pad usage and ICIQ scores decrease dramatically in the first 12 months. At 12 months mean ICIQ scores are 3.0. 89.9% are socially continent. Increasing age and pre-operative UI are strong predictors of post operative UI up to 18 and 24 months respectively. Pre-operative TURP leads to a delayed return of continence. There was no significant difference in outcomes with prostate size, BMI, extended lymph node dissections, bladder neck sparing procedures, training cases or surgeon experience.

Conclusion
Overall continence rates are good after RP. Increasing age and pre-operative incontinence are the only parameters that significantly affect long term outcomes.
Title of presentation
Audit of Management of Stable Prostate Cancer Patients

Authors
Andrea Tay, Pieter Le Roux

Institution
Epson & St Helier University Hospitals

Presenting author
Andrea Tay

Abstract
Introduction

There is a national agenda (NICE, White Paper & QIPP) to provide follow up in primary care for suitable prostate cancer patients. Our local Clinical Commissioning Groups (CCG's) are working with our urology department in developing new models for follow up.

The aim of this audit is to identify number of patients who would be suitable for discharge and see how they are currently followed up.

Method

Patients from all urology clinics in November 2015 were identified with iPM, excluding TWOC, flexible cystoscopy, TRUS, ESWL & nurse led clinics. Electronic records were interrogated retrospectively. Information on prostate cancer diagnosis, suitability for discharge and follow up post treatment were collected.

Suitability for discharge was measured against NICE & NHS Sutton CCG guidelines. This includes patients who are stable 2 years post treatment with curative intent (radical prostatectomy, radiotherapy & brachytherapy), on hormone therapy and on watchful wait.

Results

1178 patients were seen in November 2015. 161 prostate cancer patients were identified. 46 were suitable for discharge. Only 17 were discharged and 31 potential discharges were missed. 17/31 were on hormone therapy & 9/31 on watchful wait. Average age was 81.7 with average excess follow up of 35 months.

Discharge information was inadequate. Of the 17 patients discharged, 13 had advice on frequency for PSA checks, but minority had treatment summary, PSA diary & advice on when to re-refer.

Conclusion

A substantial number of prostate cancer patients are suitable for transfer to GPs, only 37% were discharged in our trust, often with inadequate discharge information. Success will depend on improved interaction between secondary and primary care, upskilling within the community and empowering patients with improved communication and accurate treatment summaries.
Title of presentation
Post Prostatectomy Incontinence Surgery: Early outcomes from a new service for the region

Authors
Manoj Ravindraanandan, Elaine Hazel, Karen Briggs, Sachin Malde, Claire Taylor, Evangelos Zacharakis, Arun Sahai

Institution
Guy’s and St Thomas’ NHS Foundation Trust

Presenting author
Manoj Ravindraanandan

Abstract

Introduction
This audit examines indications, efficacy and complications of post prostatectomy incontinence (PPI) surgery, over our first 3 years.

Method
A prospective database was constructed in October 2013 with 52 patients undergoing surgery for bothersome PPI. The cohort includes some patients in the MASTER trial. Patients were assessed with urodynamics, flexible cystoscopy, 24-hour pad weight and the ICIQ-MLUTS questionnaire.

Results
Mean age of the cohort was 62.9. Approximately 26% had prior radiotherapy, and 30% had mixed incontinence. Male slings (MS) were performed in 25 patients and artificial urinary sphincters (AUS) in 27. There were 2 failed MSs and 4 patients developed de novo overactive bladders (16%). Prior to AUS insertion, 8 patients (29.6%) had a previous MS. Two AUSs needed revision surgery and 1 was deactivated after 2 months. MS pad numbers decreased from an average of 3.2 to 0.5 at 3 months (p<0.001), and 0.4 (p<0.001) at 12 months. Dry rate at 12 months was 67%. ICIQ-MLUTS scores reduced from 17.7 to 12.7 after 3 months (p=0.01), and 14.8 (p=0.6) at 12 months. AUS pad numbers decreased from an average of 3.9 to 0.8 at 3 months (p<0.001), and 1.1 (p=0.002) at 12 months. Dry rate at 12 months was 76.9%. ICIQ-MLUTS scores reduced from 26.5 to 12.0 after 3 months (p<0.001), and 9.5 (p=0.001) at 12 months.

Conclusion
Early outcomes in our cohort are encouraging with both MS and AUS. AUS has a better dry rate when compared to MS. However, further audit and longer-term follow-up is required.
Title of presentation
Robotic-assisted bladder diverticulectomy: point of technique to identify the diverticulum

Authors
Annelisse Ashton, Jamie Lindsay, Ricardo Soares, Dimitris Moschonas, Krishna Patil

Institution
Royal Surrey County Hospital

Presenting author
Annelisse Ashton

Abstract
Introduction: Bladder diverticula represent a herniation of the bladder that can be congenital but are more often secondary to outflow obstruction. Even after resolution of the obstruction, diverticula may cause incomplete emptying of the bladder and, consequently, infections, stones and can be associated with cancer. Excision of the diverticulum significantly improves patients’ complaints. We aim to outline our technique of performing robotic-assisted diverticulectomy at our institution and report our surgical outcomes.

Material and Methods: We report the cases of three robotic-assisted bladder diverticulectomies, performed at the Royal Surrey County Hospital during the period of 2014 to December 2015. A 6Fr double-J stent was prophylactically inserted at the start of the procedure. Patient positioned in low dorsal lithotomy position with port placement similar to robotic-assisted laparoscopic radical prostatectomy. Foley catheter was placed over guide wire into the diverticulum and balloon inflated on the diverticulum neck. We used a transperitoneal extravesical approach to mobilize the distended bladder diverticulum, dissected en bloc and transected at its neck in all cases. The bladder was closed in 2 layers with absorbable sutures.

Results: The procedures were uneventful, without the need for conversion to open, no post-operative complications and minimal blood loss. The median length of stay was 3 days and all 3 patients (mean age 72 years) reported a significant improvement in all symptoms with minimal post-void residual.

Conclusion: Robotic-assisted bladder diverticulectomy is a safe and effective procedure that results in both symptom relief and minimal post void residuals.
Title of presentation
Robotic-Assisted Ureteral Reimplantation – Our Experience

Authors
James JY Chong, Peter Penkoff, Julie Pain, Elizabeth Osinibi, Mark Wright, Ben Eddy

Institution
Department of Urology, Kent and Canterbury Hospital, East Kent Hospitals University NHS Foundation Trust and Bristol Urological Institute, Southmead Hospital, North Bristol NHS Trust

Presenting author
James JY Chong

Abstract
Introduction
Reimplantation of the ureter has traditionally involved open surgery. Minimally invasive approaches to ureteric reimplantation remain technically challenging, especially in patients with previous abdominal incisions; the use of a robotic surgical system may help to overcome many of the challenges presented with conventional laparoscopy. We present our initial experience of different da Vinci robotic-assisted ureteric reimplantation procedures over an 18-month period.

Methods
Between March 2015 and October 2016, 19 patients underwent ureteric reimplantation for varying pathologies at two centres; these included ureteric strictures secondary to pelvic endometriosis, stone disease, bladder diverticula and iatrogenic ureteric injury. The mean age at time of reimplantation was 50 years (23-78 years).

Results
The procedures included distal ureteric resections with reimplantation and psoas hitch, bladder diverticulectomy with reimplantation, and uretero-ureterostomy. The median operative time was 155 minutes, and the median hospital stay was 1 day. No intra-operative complications were observed, and no cases required surgical conversion.

Post-operative complications include urinary tract infection in one patient at 4 weeks, and residual reflux pain on voiding in three patients. There was one readmission due to pain. The mean follow-up time was 4.7 months, with all patients having no evidence of urinary tract obstruction.

Conclusions
Robotic-assisted ureteric reimplantation is safe, feasible and effective and offers a minimally invasive alternative to traditional open surgery. Outcomes have been favourable in short-term follow-up.
Title of presentation
Management of vesicovaginal fistula: Outcomes and future recommendations

Authors
H Jenkins, S Kulendran, S Malde, C Kelleher, A Sahai, MS Khan

Institution
Department of Urology & Urogynaecology, Guy’s and St Thomas’ NHS Trust & King’s Health Partners

Presenting author
H Jenkins

Abstract

Objectives:
Surgical management of vesicovaginal fistula (VVF) is topical with discussions to possibly centralise services. The aim of this audit was to review outcomes of VVF repair from our trust and suggest recommendations for future management.

Methods:
A retrospective case review was performed using data from Electronic Patient Record and Galaxy systems, from August 2008 - August 2016. Data collected included aetiology, investigations, approach, length of stay, outcomes and complications.

Results:
All cases were managed with a MDT approach involving urology and urogynaecology. In total 33 cases were identified with an average age of 47.8 years. The most common aetiology was post hysterectomy (54.5%) followed by pelvic radiation (24.2%). Twenty-three patients were treated with either vaginal (39.4%) or abdominal approach (30.3%), and in ten cases a urinary diversion was deemed most appropriate given the clinical circumstances. Vaginal approach was associated with shorter length of stay and fewer complications. Complications were minimal except for one patient who required a laparotomy for small bowel perforation. Success rate of VVF repair was 87.9% at first attempt. Of the failed procedures, two were successful after the second repair; another after a third repair, and the fourth patient is still under investigation.

Conclusions:
Successful outcomes for VVF can be achieved using a multidisciplinary approach. The vaginal approach has shown to have better patient outcomes in terms of both post-operative complications and shorter admissions. Not all cases are suitable for transvaginal surgery and an individualised approach with knowledge of both vaginal and abdominal techniques is essential.
Title of presentation
Improving the documentation of flexible cystoscopy notes: closed loop audit

Authors
Ola Blach, Ahmed Ali, Jie-Ying Kow, Simon Bott

Institution
Frimley Park Hospital

Presenting author
Miss Ola Blach

Abstract
Aim and Objectives:

Good Surgical Practice (RCS) dictates that comprehensive and legible records are maintained by surgeons of all their interactions with patients. Flexible cystoscopy (FC) notes should be no exception to this standard.

Currently at Frimley Park (FPH), for every cystoscopy, FC operators document the same information in two different locations: handwritten in patient notes and electronic discharge letter.

The aim of this audit therefore was to assess the quality of FC notes at FPH against the Good Surgical Practice standards, address any areas needing improvement, and reassess as appropriate.

Methods:

A closed loop audit of FC notes at FPH was undertaken and data were collected using patients’ case notes. Notes were scrutinised against the RCS and BAUS standards. First period was 13-17/10/2015 and the second period was 20-31/05/2016. A total of 73 patients were included (43+30).

Results:

The first cycle highlighted several areas requiring improvement. 8/15 parameters fell short of the 100% target compliance: time (5.9%), responsible consultant (32.4%), operator (50%), post-operative instructions (82.4%), indication (85.3%), date (88.2%), procedure (91.2%), and signature (97%).

Subsequently, new electronic FC proforma was designed using the RCS/BAUS criteria for data to be documented. A successive re-audit, using identical criteria, established 100% compliance in all fields.

Conclusions:

Adapting the new proforma significantly improved the quality of FC documentation. This was especially important in capturing the name of the responsible consultant and eliminating issues around hand writing and drawing.

As a result, new online software has been installed incorporating the new proforma, allowing the data to be easily accessed and read.
Title of presentation
Acute Testicular Torsion - Auditing the Length of Time from A+E Presentation to Scrotal Exploration

Authors
Jamie Lindsay, Annelisse Ashton, Ricardo Soares

Institution
Royal Country Surrey Hospital

Presenting author
Jamie Lindsay

Abstract
Introduction and objectives

Acute testicular torsion is considered to be a urological emergency. The rate of testicular salvage reduces with increasing time from symptom onset to scrotal exploration. The successful management of torsion is therefore dependent on minimising delays in the patient pathway from arrival in Accident and Emergency to definitive detorsion in theatre. We aim to analyse where delays occur in this pathway in order to reduce them.

Method

A retrospective evaluation was performed of the key intervals in the pathway from presentation in A&E to operation for all patients who underwent emergency 'exploration of scrotum' between March and September 2016.

Results

Eight patients underwent scrotal exploration in this 6-month period. Average patient age was 13 years and 7 months. Operations consisted of 3 testicular appendix excisions, 2 testicular detorsions, 2 orchiectomies and an epididymal cyst excision. Median time from presentation to theatre was 4 hours 3 minutes (range 80-657 min). The longest interval was found to be from senior urologist review to operation at 103 minutes (range 65-210 min). The 2 cases requiring orchiectomy had the longest times from arrival to operation (300 and 657 min).

Conclusion

Ten key learning points relating to our experiences with individual patients to other broader causes of pathway delays have contributed to the production of an ‘Acute Scrotum Pathway’. This will aim to reduce the time from A+E presentation to scrotal exploration to 60 minutes.
Title of presentation
Dispelling the myth of the Holep Learning Curve

Authors
Mukhtar S., Whiting D., Henderson A.L., Cynk M

Institution
Maidstone and Tunbridge Wells NHS Trust

Presenting author
D Whiting

Abstract
Holmium laser enucleation of the prostate (HoLEP) is reported to have a steep learning curve, which may limit its introduction into training programmes. Although some articles have suggested HoLEP can be learnt in 60 cases, the learning curve of trainee surgeons has not been assessed. The purpose of this study was to analyze the learning curve and early complications in the hands of a trainee.

Methods
A single trainee (SM) working under the supervision of two consultant surgeons (ALH and MC) completed sixty-four (n=64) procedures for patients with BPH between October 2013 and August 2016.

Training took place in a stepwise fashion and followed the Holmium User Group template, beginning with observation and morcellation, extending onto enucleation and completion of HoLEP independently.

A number of pre, intra and post-operative parameters were measured including IPSS, QoL, and Qmax. Operative efficiency was calculated using enucleated weight/enucleation time. Laser efficiency was calculated using energy used/enucleated weight. Prostate volume was derived either by MRI, TRUS or DRE. Complication rates were analysed using the Clavien-Dindo Classification.

Results.
Mean prostate volume was 68.3 mL (range 40-170) and preoperative IPSS was 18 (6-33). Mean post-operative IPSS was 6 (0-21). Mean enucleated weight was 29.1g +/- 24.7g with mean enucleation time being 37.4min +/- 31.89 mins. Mean energy usage was 181.4kJ +/- 103.7kJ.

HoLEP independence was achieved after the 21st case with laser efficiency improving substantially after the 30th case (20.8kJ/gm vs 9.98kJ/gm). Following independence, daycase Holep was achieved in 14 of 17 patients included in a daycase Holep protocol. (82%) There were 2 Grade III Clavien complications, requiring endoscopic management.

Conclusions
Our results demonstrated that the operative learning curve plateau is reached after about 30 cases. We also demonstrate that a daycase Holep protocol can be maintained within a training regime.
Title of presentation
The Virtual Stone Clinic – The Future of Stone Management in the NHS?

Authors
Smith T, Blach O, Baker S and Symes A

Institution
Brighton

Presenting author
Thomas Smith

Abstract
Introduction
NHS outpatient waiting lists are increasing. In January 2016, 976 patients were awaiting a Brighton Urology appointment, with routine stone-clinic referrals seen after 6 months. Patient experience was poor with high DNA rates. A virtual stone clinic (VSC) was created to improve the service.

Methods
VSC set up was based on the award-winning virtual fracture-clinic. A consultant-led once-weekly VSC was supported by a MDT (stone-registrar, ESWL radiographer and nurse). Referrals were triaged direct from source. A target of 20-30 patients per week was set and a tariff of £64 agreed. We assessed outcomes following the first 2 months of the service.

Results
212 patients were seen. 90(42.5%) were discharged without further investigation. Of the 122(57.5%) who required follow up, 89 were brought back to the VSC, and 33(15%) were invited to an outpatient appointment (to discuss invasive treatment or for metabolic evaluation). 83% were discharged following second virtual clinic review. Income from the 1hour-long weekly VSC was £13,568 vs. £24,960 from 4hour-long comparable outpatient clinics. The projected income had the VSC run for 4hours was £54,272. The 6 month waiting list was cleared. All new referrals were reviewed by a Consultant within 1 week. Feedback from patients was good with 1 complaint(0.5%) and 8 DNA’s(3.8%).

Conclusion
The VSC is cost effective and has clear benefits with regards to reducing waiting lists and improving patient care. VSCs avoid time consuming telephone follow-up clinics and free-up outpatient appointments for other activity or complex stone patients. Early experience suggests patients enjoy the service.
Title of presentation
MicroTeSE: The Gold Standard for Non-Obstructive Azoospermia

Authors
J Lee & A Grewal, P Sangster¹, Y Dajani², K Ahmed¹, K Briggs¹, Y Khalaf², Y Kopeika², M Shabbir¹

Institution
¹ Andrology & Genito-Urethral Reconstructive Urology Team & ² Assisted Conception Unit, Guy’s and St. Thomas’ NHS Foundation Trust

Presenting author
J Lee

Abstract

Introduction
Microdissection testicular sperm extraction (micro-TeSE) is increasingly being recognised as the surgical sperm retrieval (SSR) technique of choice in non-obstructive azoospermia (NOA). We reviewed our experience of this technique assessing factors predictive of successful retrieval.

Methods
Interrogation of our prospectively curated database of 101 micro-TeSE’s (2013-2016). Clinical factors considered included FSH levels, histopathology and impact of previous SSR. Outcomes included SSR rate, fertilisation rate, embryo quality, pregnancy and live births.

Results
SSR was achieved in 59% (60/101), with a 35% retrieval rate in sertoli cell only (SCO), 88% in maturational arrest (MA) and 95% in hypospermatogenesis (HS). In cases of mixed histology (SCO with another sub-type), the success rate was 100%. Mean FSH was 22.5 (successful SSR) and 28.4 (unsuccessful SSR) mIU/mL (p=0.18). Micro-TESE was successful in 63% (5/8) of previous failed conventional SSR cases, and in 60% (3/5) of microTeSE performed with radical orchidectomy for NOA in testis cancer (onco-TeSE). For couples who progressed to ICSI; 43/44 (98%) achieved fertilisation and 40/44 (90%) progressed to embryo transfer; 21/40 (53%) had blastocysts, 9/40 (23%) developed clinical pregnancy and 5/40 (13%) had successful live births (6 children).

Conclusion
Micro-TESE is an invaluable SSR technique in NOA, and should be considered even if conventional SSR has failed. SSR rates vary according to histopathology, but are not affected by presence of concurrent tumour. FSH is not predictive of success. While embryo transfer rates are high, live birth rates, also influenced by female factors, are reduced compared to IVF in obstructive cases.