

Tunbridge Wells Hospital

KSS & South Thames Urology Regional Meeting

3 November 2015



Tunbridge Wells Hospital Education Centre. Tonbridge Rd, Tunbridge Wells, Kent TN2 4QJ 01892 823535



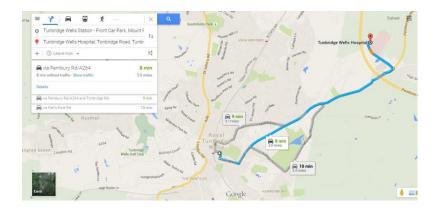
Travel by Car

Tunbridge Wells Hospital, Tonbridge Road, Pembury Tunbridge Wells. TN2 4QJ

Travel by Train

Train to Tunbridge Wells Station & Taxi to hospital







Agenda

12.00	Arrival and Registration
12.30	Lunch and Pharmaceutical Company Stands
	(food provided)
1.30	Presentations
3.00	Coffee
3.30	Presentations
5.00	Training update details and Summary of the Day
5.30	Closing of meeting

This educational meeting has been kindly supported by

ALLERGAN, AMENARINI, ASTELLAS, BOSTON SCIENTIFIC, FERRING, iMEDIcare, PFIZER, PROSTRAKAN

(strictly in alphabetical order)

1.30 – 3pm Presentations

<u>Urinary tract reconstruction outcomes following total pelvic exenteration for locally advanced and recurrent rectal cancer</u>

O Khan, D Patsouras, R Thuiairaja, MS Khan, M George, A Schizas, A Sahai

"Blood in pee" campaign - has it increased workload?

D. Akiboye, O. Bottrell, T. Malthouse, T. Nitkunan,

The effect on sexual function following Holmium Laser Enucleation of the Prostate (HOLEP)

Kulkarni M, Tsiotras A, Penev B, Cynk M, Henderson A

<u>Urinary tract infections in the intradetrusor Botox® population</u> Esmé White, Shahzad Ahmed, Roger Walker, Tharani Nitkunan

Salvage Male Stress Urinary Incontinence Surgery: Early Experience from a new service for the region

Jai Seth, Sophie Rintoul-Hoad, Sachin Malde, Claire Taylor, Majed Shabbir, Arun Sahai, Evangelos Zacharakis

<u>Licensed and approved vs traditional dose of OnabotulinumtoxinA in</u> <u>refractory overactive bladder</u>

D Eldred-Evans, J Seth, C Dowson, S Malde, C Taylor, J Watkins, MS Khan, P Dasgupta & A Sahai

An audit of outpatient procedure income

Samantha Muktar, Christian Brown

Validation of a Patient Reported Outcome Measure (PROM) for penile curvature surgery.

Angus Campbell, Deji Akiboye, Saheel Mukhtar, Tet Yap, Matthew Jackson & Nicholas Watkin

3.30-5pm Presentations

NMP-22 vs. cytology in upper urinary tract pathology. M Sahu, Kulkarni M, S Mukhtar, M Deputy, Cynk M

Radiation Exposure in Urological Procedures: Are we consistent or are patients and staff at unnecessary risk?

Smith T, Kulkarni M, Krishnan R and Shrotri N

Robotic versus laparoscopic nephrectomy from a single centre: comparing apples with oranges?

Wayne Lam, Mollika Chakravorty, Theo Malthouse, A. Kadirvelarasan, Norbert Doeuk, Ben Challacombe

Focal HIFU at Basingstoke - 7 year follow-up.

Andrew Chetwood, Emma Thomas, Sally Sawyer, Simon Bott, Richard Hindley.

Intra-operative margin detection using Cerenkov luminescence Imaging during radical prostatectomy – Initial results from the PRIME study C.Michel¹, A. Freeman², C. Jameson², W. Waddington³, D. Tuch⁴, M. Harboe⁴, P. Cathcart¹

<u>Does Intravesical injection of OnabotulinumtoxinA (Botox®) Efficacy and Durability Change with Repeated Injections</u>

T.J. Marshall, K Howard, S Sutherland, W Mulhem, M.Y. Hammadeh

Anaemia and Iron in Complex Open Retroperitoneal Urological Surgery Christopher Down, Tim O'Brien

<u>Urinary tract reconstruction outcomes following total pelvic exenteration for locally advanced and recurrent rectal cancer</u>

O Khan, D Patsouras, R Thuiairaja, MS Khan, M George, A Schizas, A Sahai

Department of Urology, Guy's Hospital, Guy's and St Thomas' NHS Foundation Trust, King's Health Partners, King's College London

Introduction

The aim of this study is to assess the outcomes of urinary tract reconstruction following pelvic exenteration for rectal cancer with a specific focus on adverse events and complications.

Methods

This was a single centre retrospective study. Electronic patient records were evaluated to assess demographics, pathological findings, urological complications, overall outcome and survival. We used chi square tests to compare outcomes between patient groups with a threshold of p<0.05.

Results

A total of sixty patients (21 females, 39 males, mean age, 61 years) were identified. Thirty-six patients had a primary rectal cancer while twenty-four patients had a recurrent rectal cancer. Forty-two patients (70%) received chemo-radiotherapy. Fifty-seven patients (95%) received an incontinent diversion, which included fifty-five ileal conduits and two colonic conduits. Three (5%) patients received a continent pouch using the mitrofanoff principle. The rate of urological complications in our series was 55%. 52% of complications occurred within 90 days whilst late complications accounted for 48%. The majority of patients had a clavien-dindo score of 2 (30%), while only two patients (3%) suffered life-threatening complications. The most common complications were urinary tract infection (37%), renal insufficiency (13%), and pyelonephritis (7%). Ureteric strictures were seen in 5% overall. Reoperation rates were 10% for our patient group, 66% (n=4) occurring within 90 days. There was no significant difference in urological outcomes in patients with primary or recurrent rectal cancer (p=1) or chemo-radiation status (p=0.78).

Conclusion

Our urological outcomes and complication rates are acceptable following total pelvic exenteration surgery with no significant difference between primary and recurrent rectal cancer or those receiving chemo-radiation.

"Blood in pee" campaign – has it increased workload? D. Akiboye, O. Bottrell, T. Malthouse, T. Nitkunan,

Epsom & St Helier University Hospitals NHS Trust

Introduction

The "Blood in Pee" media campaign was launched by Public Health England nationally in October 2013. Its main aim was to increase public awareness of haematuria and the associated risk of malignancy. The aim of this study was to determine whether there was an increase in two week rule (TWR) referrals and whether there was a subsequent increase in cancer detection following investigation.

Methods

From January 2013 to April 2015, data was collected retrospectively on TWR haematuria referrals over multiple snapshot audits. Data collected included haematuria type, patient demographics, and imaging and cystoscopy outcomes.

Results

TWR referrals have increased from an initial 30 per month to 57 per month. The incidence of referrals for visible haematuria increased from 18 per month to 41 per month (+124%).

Malignancy was detected initially with 4 cases per month, and on further audit with 9 cases per month. Specific rise of new bladder tumours was from 2.7 to 7 per month.

A mid-period audit in 2014 showed that the number of TWR referrals was 53 per month and visible haematuria referrals were 36 per month.

Conclusion

Increased public awareness of haematuria by the "Blood in Pee" campaign has increased our referrals as described by other published studies which, has been sustained. We have experienced a subsequent rise in number of cancer cases diagnosed. With a new campaign expected in February 2016 we should be prepared to allocate further resources to deal with the possible increase in workload from referral through to treatment.

The effect on sexual function following Holmium Laser Enucleation of the Prostate (HOLEP)

Kulkarni M, Tsiotras A, Penev B, Cynk M, Henderson A

Maidstone and Tunbridge Wells Hospital

Objective

To evaluate the patient-reported sexual function outcomes of holmium laser enucleation of the prostate (HoLEP) for the treatment of lower urinary tract symptoms secondary to prostatic enlargement.

Methods

71 patients were evaluated in this retrospective study of a prospectively-recorded database, between June 2014 and May 2015.

Sexual function was assessed before and after HoLEP procedure, using the Male Health Inventory Score. International Prostate Symptom Scores (IPSS) was also included for additional functional outcome analysis.

Results

Mean patient age was 70 years. Mean prostate volume was 50g (24-112g). Scores regarding confidence and satisfaction with intercourse and the ability to maintain erection did not show significant change from baseline. Furthermore the use of medications for erectile dysfunction did not change post HOLEP. There was, however, a significant improvement from baseline in IPSS score over the same time period.

Conclusion

This preliminary data has demonstrated that HoLEP has a significant impact on IPSS with no adverse impact on patient-reported sexual function. We have begun a prospective study of patients, and will evaluate scores are more defined intervals. This represents an important tool that can be used during the pre-operative counselling of patients considering surgical therapy for benign prostatic hyperplasia.

<u>Urinary tract infections in the intradetrusor Botox® population</u> Esmé White, Shahzad Ahmed, Roger Walker, Tharani Nitkunan

Epsom and St Helier University Hospitals NHS Trust

Introduction

A significant side effect following intradetrusor Botox® is urinary tract infections (UTIs), affecting between 2-32% of patients. This audit aims to investigate the incidence of UTIs following intradetrusor Botox® procedures within our trust. Our current antibiotic prophylaxis policy is one dose of intravenous Cefuroxime for general anaesthetic procedures or a three day course of Trimethoprim for local anaesthetic procedures.

Methods

Data was collected for Botox® procedures carried out at our trust from 2005 to August 2015. Information was taken from our Botox® database, clinic letters and microbiology results.

Results

There were a total of 290 Botox® procedures performed, on a population of 86 patients, with 20% under local. Idiopathic and neurogenic populations were 70% and 30% respectively. The rate of proven UTIs following a procedure was 33% (32% and 34% of idiopathic and neurogenic populations respectively). 42% of those performing self-catheterisation had UTIs compared to 18% of those who weren't. 50% of patients never had a proven UTI following their Botox procedure.

The most common organism cultured was Coliform species making up 80% of all infections. The percentage of all organisms sensitive to Trimethoprim was 43% and the antibiotic with the greatest sensitivity for both Coliforms species and overall was Nitrofurantoin at 82%.

Conclusions

Our audit showed a high rate of resistance to Trimethoprim in this intradetrusor Botox® population with an increased risk of UTIs with self-catheterisation. We are working with our microbiology team to review our antibiotic policy.

Salvage Male Stress Urinary Incontinence Surgery: Early Experience from a new service for the region

Jai Seth, Sophie Rintoul-Hoad, Sachin Malde, Claire Taylor, Majed Shabbir, Arun Sahai, Evangelos Zacharakis

Guy's and St Thomas' hospital NHS Trust

Introduction

Arificial urinary sphincter(AUS) remains the gold standard for bothersome post prostatectomy stress urinary incontinence(SUI). Alternatives such as the male sling are increasingly utilised and a popular patient choice as they do not require any input to function and are technically easier to insert. The aim of this prospective audit was to examine outcomes of AUS insertion for bothersome recurrent SUI following a prior failed SUI procedure.

Patients and Methods

Patients included attended a tertiary continence service over a 24-month period. Patients with recurrent SUI, were evaluated with urodynamics, flexible cystoscopy and 24hour pad weights. International-Consultation-on-Incontinence-Questionnaires including Urinary-Incontinence Short-Form(UI-SF) and Male-LUTS(MLUTS) were used to objectively assess symptoms at baseline, 3-months and 12-months post-surgery.

Results

Seven patients were identified, 6 with previous Virtue® sling surgery and 1 with prior AUS. Five had received radiotherapy and one cryotherapy. Mean age was 73yrs and pad weight 814g (250-1300g). Significant improvements in pad use/24hrs was seen from 5.5 at baseline, to 1.5 and 1 at three and twelve months, respectively. Similarly significant improvements in symptom and quality-of-life were seen with UI-SF scores improving from 20.6 to 5.0 to 5.3, and ICIQ-MLUTS from 23.5 to 12.3 to 12.3 at baseline, 3months and 12months, respectively. One patient failed treatment with radiation cystitis and decompression haematuria after cuff activation, leading ultimately to device removal.

Conclusions

Salvage AUS surgery is feasible, safe and efficacious in this challenging group. Careful patient selection for the most appropriate SUI surgical procedure is critical in order to reduce rates of salvage surgery.

<u>Licensed and approved vs traditional dose of OnabotulinumtoxinA in</u> refractory overactive bladder

D Eldred-Evans, J Seth, C Dowson, S Malde, C Taylor, J Watkins, MS Khan, P Dasgupta & A Sahai

Department of Urology, Pelvic Floor Unit, Guy's and St Thomas' NHS Trust

Introduction

The licensed dose of OnabotulinumtoxinA in refractory idiopathic overactive bladder (OAB) is 100U. Prior to regulatory approval we were administering 200U on an off-license basis. The effect of reducing the dosage in a 'real life' practice setting needs to be established and so outcomes in these 2 groups were compared.

Methods

A prospective database was accessed to gather information on patients' first OnabotulinumtoxinA injection with either 100 or 200U. Outcomes included OAB symptoms, quality of life and safety profile. Additional retrospective data was collected on discontinuation rates, time to request re-treatment and interinjection interval. Statistical analysis included paired t-tests for continuous variables and chi squared test of categorical variables.

Results

The study population included 78 patients who had received 100U and 86 patients with 200U. A greater reduction in mean frequency episodes was found in the 200U group (p = 0.025). The remaining OAB symptoms and quality of life scores did not demonstrate any significant difference. 41.8% of patients who had 100U required dose escalation to improve efficacy. A longer duration of effect was demonstrated in 200U (13.2 months vs. 9.4 months). A higher risk of raised PVR, need for de novo CISC and discontinuation was seen in patients receiving 200U.

Conclusions

Outcomes in general were comparable. A longer duration of effect, higher CISC and discontinuation rate was observed in the 200U group. Overall this study supports the initial dose of 100U in patients with refractory idiopathic OAB, however, dose escalation maybe required.

An audit of outpatient procedure income Samantha Muktar, Christian Brown

King's College Hospital

Introduction

Coded clinical data uses rules and conventions that, when applied accurately result in the provision of high quality statistically meaningful data. Financially, coded clinical data is grouped to meet the reporting structure of 'Payment by Results' to ensure trusts are paid accurately for activity.

Methods

A retrospective audit to review the number of outpatient procedures performed over a one week period within a busy urology department. Clinic letters were reviewed for evidence of procedures performed that were previously not specifically coded for. New outcome forms were implemented to include an 'outpatient procedure income table' to be completed by the clinician at the end of the consultation to aid accurate coding. Following new outcome forms, we re-audited a further week of clinic letters to assess the financial implication of the new forms.

Results

On average there were 368 patients reviewed in urology outpatients with 86 procedures performed per week. If all procedures were coded correctly this audit demonstrates an expected weekly income increase of £23,7548 per week.

Conclusion

The business intelligence unit at our trust has seen an increase of average weekly income by £14,000 in urology outpatients following new outcome forms. The discrepancy in actual financial gain compared to expected gain likely highlights inaccurate completion of the outcome forms. Coding data should be a true reflection of hospital activity so establishing a clinical coding system for all procedures financially benefits the department significantly.

<u>Validation of a Patient Reported Outcome Measure (PROM) for penile curvature surgery.</u>

Angus Campbell, Deji Akiboye, Saheel Mukhtar, Tet Yap, Matthew Jackson & Nicholas Watkin

St George's University Hospital; Epsom and St Helier University Hospitals

Abstract

The subjective measures of successful penile curvature surgery are poorly defined. This study describes a PROM for baseline and post-operative assessment of patients with Peyronie's disease (PD).

Questions were selected following semi-structured interviews with PD patients. A multidisciplinary RAND consensus group of UK andrologists defined the item-specific PROM.

The final construct domains were penile curvature (PC), erectile function (EF), sexual relationships and generic health related quality of life (HRQoL). The draft PROM was piloted until a final version was agreed for this validation study.

Over a 3-year period, all consecutive patients being considered for PD surgery were offered the PROM in one specialist centre.

Internal consistency was assessed using Cronbach's α to understand if construct domains reliably measured the same latent variable. Variability and bias was assessed using a Bland Altman plot.

The baseline PROM was self-completed pre-operatively in a test-retest fashion by 46 men. All questions had response rates >85%.

Cronbach's alpha for the penile curvature construct was 0.78 ranging from 0.68 to 0.8 with any single item removed.

Wilcoxon Signed Rank test for the penile curvature construct indicated no significant difference between the test and re-test scores (P<0.62).

Variability remains consistent as average PC scores increase. Average differences between scores (bias) is small (0.889) so future measurements should lie between the limits of agreement (+8 to -8) 95% CI.

The PC questions were answered consistently well and demonstrated content validity and reliability. To establish responsiveness, validity and generalisability of a PROM containing the most robust items from this analysis, deployment is required pre and post-operatively across healthcare providers.

NMP-22 vs. cytology in upper urinary tract pathology. M Sahu, Kulkarni M, S Mukhtar, M Deputy, Cynk M

Maidstone & Tunbridge Wells Hospital

Introduction

The role of nuclear matrix protein-22 (NMP-22) as a diagnostic adjunct in bladder cancer has been well documented. However, its role in the assessment of possible upper tract urothelial carcinoma is poorly understood.

We sought to compare the sensitivity and specificity of the point-of-care test, NMP-22, with cytology, in the setting of upper urinary tract pathology.

Methods

Pre-operative urine samples from 60 consecutive patients were prospectively analysed using NMP-22 and cytology. Both these results were compared against ureteroscopy and histopathology findings to calculate sensitivity, specificity, positive and negative predictive values for these 2 urinary markers. In a further thirty patients, results from the NMP-22 test were compared against diagnostic ureteroscopy findings.

Results

The overall sensitivity and specificity of NMP-22 was 54% and 72%, respectively. This was in comparison to 75% and 80% for cytology. In the context of benign diagnoses (n=28) NMP-22 was correctly negative in 58% of cases, similar to cytology (n=16, 57%). Where no pathology was observed on ureteroscopy, NMP-22 was correctly negative in 85% of cases (n=27) compared to cytology where 64% of cases were correctly negative (n=14).

Conclusions

We conclude that the overall sensitivity and specificity of NMP-22 is not significantly better than cytology in the context of upper tract pathology. Like cytology, NMP-22 cannot be used as a sole investigation in the assessment of patients. We recommend the continuing use of ureteroscopy to confirm or rule out diagnoses.

Radiation Exposure in Urological Procedures: Are we consistent or are patients and staff at unnecessary risk? Smith T. Kulkarni M. Krishnan R and Shrotri N

Canterbury Hospital, East Kent NHS Trust

Introduction

X-ray visualization is integral to commonly performed urological procedures. X-ray exposes patients and staff to ionising radiation, which can induce DNA damage and increase the risk of developing malignancies.

Minimal guidance is available regarding diagnostic reference levels (DRLs) of radiation for these procedures and instead principles of as low as reasonably achievable are commonly adhered to. We aimed to assess if radiation exposure used in our unit met local diagnostic reference levels and if there was variation between surgeons.

Patients and Methods

A retrospective single centre audit was performed over three separate 3-month periods. The radiation use was calculated for all retrograde ureteric stent insertions performed. During the first audit cycle surgeons were not aware of the ongoing audit. During the second and third cycles surgeons were aware of the ongoing study. Before the third cycle all surgeons attended an educational session on radiation use. Radiation use was compared to DRLs and comparison was made between surgeons.

Results

Over the three audit periods 360 retrograde ureteric stent insertions were performed. 41 cases (11.4%) exceeded the DRL. Of the cases that exceeded the DRL 29 (70.7%) were performed by urologists in training. Following the education programme surgeons had a reduced average radiation use per case. There was also a reduced range of radiation use between surgeons following the education programme. In all audit cycles, the best performing urologist in training, with regards to radiation use, exceeded the radiation used by the worst performing fully trained urologist.

Conclusions

A significant number of urological procedures exceed acceptable radiation exposure levels especially when performed by urologists in training. There are also inconsistent and wide variability in levels of exposure used between surgeons. The cumulative product of increased exposure puts patients and staff at unnecessary risk. Increased awareness and improvements are essential to minimizing the preventable risk of radiation-induced malignancies. Local protocols and DRLs should be encouraged.

Robotic versus laparoscopic nephrectomy from a single centre: comparing apples with oranges?

Wayne Lam, Mollika Chakravorty, Theo Malthouse, A. Kadirvelarasan, Norbert Doeuk, Ben Challacombe

Guy's and St Thomas' NHS Foundation Trust

Introduction

Laparoscopic nephrectomy (LN) is the standard approach for localised renal tumours or simple nephrectomy. The role of robotic-assisted nephrectomy (RAN) is yet to be determined. We compared surgical outcomes of RAN with the conventional laparoscopic approach.

Methods

Data was collected retrospectively in patients undergoing LN and RAN between April 2011 and June 2015 at a single centre. In total, 179 patients who underwent minimally-invasive nephrectomy, with 79(44%) RAN and 100 (56%) LN. Patient's ASA grade, tumour size, stage, BMI, length of stay (LOS), additional procedures and complications were compared between RAN and LN cohorts. Comparative analyses were performed using the Mann-Whitney-U test and Chi-squared test.

Results

89% of RAN and 62% of LN were carried out for malignant tumours. The RAN group had a significantly higher ASA grade (p<0.05) with a higher stage and tumour size (6.9 vs 5.9 cm). 46% of RAN malignant tumours were stage ≥T2b (including 1 requiring caval thrombus resection, 2 with renal vein invasion, 2 IVC repairs, 2 splenectomies, 1 BMI >70 and 5 retroperitoneal lymphadenectomies) compared with 32% in the LN cohort. There was an increased length of stay, median 4 vs. 3 days (p<0.05) in the RAN cohort, likely due to the higher ASA grades. 1 LN required open conversion (caval injury), with none in RAN cohort. No significant differences in pre & post-op Hb, eGFR, operating time, estimated blood loss or Clavien-Dindo complications (2 vs 3 grade III/IV) were identified between groups.

Conclusions

Surgical outcomes of RAN and LN are comparable despite more challenging, larger tumours and co-morbid patients in the RAN group. RAN may provide the surgeon with greater ability to attempt more difficult and higher stage cases and manage intra-operative complications that may otherwise lead to open conversion.

<u>Focal HIFU at Basingstoke – 7 year follow-up.</u> Andrew Chetwood, Emma Thomas, Sally Sawyer, Simon Bott, Richard Hindley.

Basingstoke and North Hampshire Hospital

Introduction

An improvement in our ability to accurately localise prostate cancer and favourable early outcome data has lead to increased interest in Focal Therapy. Focal High Intensity Focussed Ultrasound (HIFU) has been offered at Basingstoke since 2008. We present our experience.

Methods

A review of all Focal HIFU cases was performed from 2008 – 2015. Patient demographics, histology and outcomes were audited.

Results

95 cases were performed with 78 as a primary treatment. Mean age, PSA and prostate volume of 65 years, 8.3ng/ml and 39cc respectively). The majority of cases (74/78) were Gleason 3+3 or 3+4 disease. Area of ablation was Quadrant, Hemi and Sub-total in 30, 39 and 9 cases respectively. Currently 68/78 patients have required no further treatment. Repeat HIFU, radical prostatectomy, EBRT and cryotherapy have subsequently been performed in 5, 2, 2 and 1 patient respectively. We report no prostate cancer deaths, 1 case of metastatic disease and 1 death from metastatic lung cancer. We report excellent functional outcomes with no patients wearing pads, >50% maintaining antegrade ejaculation and no significant change in urinary symptoms, erectile function or quality of life.

Conclusion

Focal HIFU represents a safe, minimally morbid treatment option for localised prostate cancer.

Intra-operative margin detection using Cerenkov luminescence Imaging during radical prostatectomy – Initial results from the PRIME study C.Michel¹, A. Freeman², C. Jameson², W. Waddington³, D. Tuch⁴, M. Harboe⁴, P. Cathcart¹

¹Dept. of Urological Surgery, University College Hospital of London ²Dept. of Pathology, University College Hospital of London ³Dept. of Nuclear Medicine, University College Hospital of London ⁴Lightpoint Medical Ltd.

Objectives

Cerenkov Luminescence Imaging (CLI) is based on optical imaging of PET radiopharmaceuticals. The PRIME (PRostate Imaging for Margin Evaluation) study is currently being conducted to evaluate the feasibility and safety of 18F-choline CLI to intra-operatively assess margin status in prostate cancer specimens and lymph node metastases, during radical robotic prostatectomy.

Methods

Initial data from 3 patients are reported. After intravenous injection of 18F-choline, all the specimens were imaged intra-operatively with an investigational CLI specimen analyser (Lightpoint Medical Ltd, UK), just after the excision. The normalised decay-corrected radiance (ph/s/cm2/str/MBq) was calculated for each region of interest and the apparent tumour-to-background ratio (TBR) was reported. Radiation doses to staff were measured using badge dosimeters.

Results

Intra-operative CLI of 3 prostatectomies showed an elevated radiance with TBR 3.45, 4.90 and 2.49 respectively for each patient. For 2 prostates with high-grade disease, CLI analyses agreed with histological reports but not for the third one, which was a low-grade. Lymph nodes were negatives both on CLI and pathology reports. We recorded no additional time of surgery or specific complications due to the CLI protocol. Staff radiation doses mirrored the proximity to the patient and the duration of the procedure, with maximal doses of 110-180 μSv for the assisting surgeon. To allow for radioactive decay, specific precautions were added for surgical environment and pathology samples.

Conclusions

Intra-operative 18 F-choline CLI is a promising, feasible and low risk procedure. Further development is required to restrict the CLI signal to the surgical margin depths used in pathology.

<u>Does Intravesical injection of OnabotulinumtoxinA (Botox®) Efficacy and Durability Change with Repeated Injections</u>

T.J. Marshall, K Howard, S Sutherland, W Mulhem, M.Y. Hammadeh

Department of Urology - Queen Elizabeth and Princess Royal University Hospital

Introduction

We reviewed the efficacy and durability of intravesical OnabotulinumtoxinA injections in patients who had received more than one injection for either refractory Idiopathic (IOAB) or neurogenic (NOAB) overactive bladder, which failed to be controlled by two or more anticholinergic medications over a period of a year.

Materials and Methods

52 patients underwent botox injections for either refractory IOAB or NOAB. Of these patients, 30 underwent repeated onabotulinumtoxinA injections. The neurogenic group had 8 patients, 7 females and one male, 7 have Multiple sclerosis. Prior to the initiation of intravesical onabotulinumtoxinA treatment, all patients had an assessment of mid-stream urine for culture and sensitivity, renal tract ultrasound scan, and conventional urodynamic study. All had symptoms assessments Questionnaire (ICIQ-UI and ICIQ-OAB) before and after the OnabotulinumtoxinA enjections.

Results

The average duration of efficacy was well maintained in the IOAB group (9.7 – 11.3 months) with good retention of efficacy through to the fifth injection. In the NOAB group, there was a slight regression in duration of efficacy (from 9.8 to 8.3 months) between cycles one and two. There was no discernible increase in side effect profile or failed treatments in either group.

Conclusions

Our study showed that repeat OnabotulinumtoxinA for refractory overactive bladder is effective and durable.

Anaemia and Iron in Complex Open Retroperitoneal Urological Surgery Christopher Down, Tim O'Brien

The Urology Centre, Guys & St Thomas' NHS Foundation Trust

Introduction

Peri-operative anaemia is associated with post-operative morbidity, delayed recovery and prolonged hospital stay. Therefore proactive management of peri-operative anaemia seems sensible. Management of anaemia in complex surgery is complicated by the peri-operative inflammatory response which interferes with absorption of oral iron. Treatment with intravenous iron is a potentially attractive approach.

Methods

Retrospective analysis of patients undergoing major open surgery by a single surgeon at Guys Hospital in 2015. Three types of operation - ureterolysis (n=13), radical nephrectomy (RN,n=36) and partial nephrectomy (PN,n=17). Haemoglobin (Hb), red cell indices and Iron (Fe) levels recorded pre-procedure and pre-discharge. Operative details, blood loss, renal function, transfusion requirements and length of stay measured.

Results

66 patients studied.

Median Hb pre-ureterolysis 116g/L(range 95-139g/l). 8/13 (62%) anaemic of whom six had confirmed iron deficiency anaemia (IDA); of these 5 /6 (83%) had CKD3. Two patients received IV Fe pre-procedure and had increases in Hb>20g/L. Median blood loss 350mls, and no patients transfused. All patients anaemic on discharge (median Hb 104g/L).

Median Hb pre-RN 116g/L(range 79-156g/l). 23/36 (64%) anaemic preoperatively. Fe levels tested in 11/23 and 8/11 IDA confirmed. In the remaining patients, 9/12 (75%) red cell indices suggested IDA. Five patients received IV Fe pre-procedure; 3/5 had increases in Hb>10g/L. Median tumour size 105mm; median blood loss 600mls; 21/36 (58%) pT3 and 16/36 (44%) transfused. 35/36 (97%) anaemic on discharge (median Hb102g/l).

Median Hb pre-PN 133g/L(range 105-164g/l). 4/17 (23%) anaemic preoperatively and none had Fe levels measured. 3/4 anaemic patients had CKD3. Median blood loss 300mls and 4 required peri-operative transfusion. 14/17 anaemic on discharge (median Hb 107g/L).

Average length of stay (days) longer across all groups if patients anaemic pre-

procedure (ureterolysis 13 vs 7; RN 14 vs 8; PN 11 vs 6).

Conclusion

There is much scope for a more proactive approach to peri-operative anaemia.