0650: RELIABILITY OF TRUS CALCULATIONS OF PROSTATE VOLUME

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Aim: Prostate size is an important parameter in the assessment and treatment of prostate cancer. Prostate specific antigen (PSA) density can influence investigation approach and volume limits are often included in acceptance criteria for template biopsy and brachytherapy. We aim to assess the accuracy of volumes calculated by trans-urethral ultrasound (TRUS) compared with those from MRI.

Method: All patients in our hospital undergoing TRUS imaging and prostatic biopsies were identified for the period of twelve months from December 2010 to 2011. Our standard protocol for potential candidates for curative therapy includes MRI quickly followed by TRUS biopsy. This allows a reasonable timeframe for comparison. Sizes were calculated using the standard ellipsoid method.

Findings: We identified 196 patients for whom MRI and TRUS volumes were documented within six weeks of each other. Results were compared with a Wilcoxon-signed rank test. No significant difference was identified (p=0.108).

Conclusion: Our results suggest that MRI prostate offers no added benefit when it comes to measuring prostate size. We feel that consistency between volumes produced by different imaging modalities is more important than absolute precision, as any thresholds will have been derived from the same methods.

0646: IS THE FREE/TOTAL PSA RATIO USEFUL AT PREDICTING THE PRESENCE OF PROSTATE CANCER ON TRANSPERINEAL PROSTATE MAPPING BIOPSIES?

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Aim: We evaluated the role of Free/Total (F/T) PSA ratio in improving the prediction of prostate cancer in the transperineal prostate mapping biopsy (TPM) setting.

Methods: The F/T PSA ratio were available in 145 patients with a total PSA < 20ng/ml. All patients underwent a standard TPM under GA. The cancer detection rate, pathologic features of the cancers detected, and the probability of cancer detection in relation to the F/T PSA ratio were estimated.

Results: Mean Age and PSA were 64.4 years and 9.5ng/l respectively (Range 1.6-20ng/ml). Overall cancer detection rate was 51.8%. 55/145 had a F/T ratio < 10 % of which 34/55 (61.8%) confirmed cancer (n=10 had Gleason 7, n=24 had Gleason 6), 66/145 had a F/T PSA ratio between 10-20% with 50% of them having positive biopsies (n=26 had Gleason 6, n=38 had Gleason 7 and only 2 had Gleason 8). 24/145 had a F/T PSA ratio > 20% and only 1/3 had evidence of cancer (all Gleason 6).

Conclusion: The F/T PSA ratio in our series failed to confer a significant benefit in improving the cancer detection rate. However, in patients with a ratio of > 20% only 1/3 had cancer present but were of a favourable grade.

0682: FEASIBILITY OF RANDOMISATION IN THE RANDOMISED CONTROLLED TRIAL OF OPEN, ROBOTIC AND LAPAROSCOPIC (CORAL) RADICAL CYSTECTOMY TRIAL

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Introduction: Minimally-invasive techniques for radical cystectomy are increasing in prevalence in the urological community. However, current evidence is lacking in which surgical technique is best.

Methods: A single-centre randomised-controlled trial comparing open, laparoscopic and robotic-assisted radical cystectomy (RARC) for muscle-invasive or high-grade bladder cancer is currently underway at our centre, to investigate the short and long-term outcomes for each of these techniques.

Results: 83 patients were eligible to be enrolled in the trial since March 2009. 54 patients agreed to participate. There was no difference between the trial and non-trial patients in terms of age (<70 years compared with > 70 years, p=0.8), gender or body mass index (BMI) (BMI<25 compared with BMI > 25, p=0.5).

Of the non-trial patients, 13 chose open cystectomy and 16 chose RARC. None in this group chose the laparoscopic technique.

Conclusion: The majority of eligible patients agreed to random allocation, and there appears to be no difference between non-trial participants towards choosing an open or robotic approach. There is no obvious selection bias in terms of age, gender or BMI for randomisation in this trial.

0704: LAPAROSCOPIC NEPHRECTOMY IN PATIENTS WITH BENIGN RENAL DISEASE AND ITS EFFECT ON HYPERTENSION

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Aim: We investigated the safety and efficacy of laparoscopic nephrectomy (LN) in the treatment of refractory hypertension in patients with a unilateral poorly functioning kidney.

Method: A retrospective review of patients undergoing laparoscopic simple nephrectomy for benign disease between 2005 and 2011 was performed using information from hospital and general practice patient records, operating theatre and pathology databases. 49 patients underwent LN for the following indications: (n=13) difficulty controlling hypertension, (n=20) chronic renal pain, (n=11) recurrent urinary tract infection and (n=5) had both pain/infection. Data collected included operative details, complications recorded using the Clavien Classification and symptom control.

Results: All procedures were completed laparoscopically with no open conversions. There was no change in post operative creatinine levels. Complications occurred in 10 (20%) patients with Clavien Classification as; Grade 1 (4) patients; Grade 2 (4) patients, Grade 3b (1) patient, Grade 4: (1) patient. In the hypertension group there was no immediate reduction in post-operative blood pressure, however on follow up 2 (15%) stopped all antihypertensive medication, 6 (46%) reduced their medication with no change in 5 (39%) patients.

Conclusions: Laparoscopic nephrectomy for symptomatic benign renal disease is safe. The high success rate in reduction of antihypertensive medication confirms its efficacy and provides useful information when counselling patients preoperatively.

0716: THE SURGICAL CARE PRACTITIONER – ASSISTING, NOT COMPETING WITH, THE EXPERIENCED REGISTRAR AS PART OF MODULAR TRAINING FOR OPEN RADICAL RETROPUBIC-PROSTATECTOMY

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Aim: Open radical retropubic-prostatectomy (RPP) requires both an experienced surgeon and assistant. We compare a Surgical Care Practitioner (SCP) as primary assistant against an experienced SpR (≥ year 4) assistant. We test the feasibility of using a SCP as assistant to a senior SpR in RRP by comparing their respective outcomes as first assistant.

Methods: Retrospective review of all RPPs between January 2010 and October 2011. The first assistant was recorded (SCP or SpR). Outcomes were (1) intra-operative re-transfusion volume, (2) post-operative haemoglobin drop, and (3) operating time.

Results: 99 RPPs were identified. 91 cases were suitable for analysis. The first assistant was the SCP in n=55 and Year 4/5 SpR in n=36.