

**Background:** The new national guideline from NHS improvement was to notify relevant team of known cancer patient being acutely admitted to hospitals providing acute oncological service. A new uro-oncology alert system by text and e-mail was set up at our District General Hospital accordingly.

**Aim:** To assess the time delay of notification of acute admission. To assess the quality of referrals and outcomes for urological cancers through the system

**Methods:** Prospective assessment of the 53 referrals through the alert system from October 2011 to January 2012.

**Results:** Of the 53, 32 patients had same day notification. Significant delay of more than 72 hours was in 3 patients. 19 of these were for urological cancer related admissions while 6 were for non urological cancers and the rest were for non cancer related events. 5 patients had urgent input in their care that has resulted in better outcomes.

**Conclusion:** About 10% of patients had averted a significant adverse outcome because of the alert. Delay in notification and false notifications are the problems of initial service setup and should be corrected at the patient inclusion level. Longer numbers are needed to ascertain if the alert system would bring about significantly better outcomes.

#### 1150: CAN RENAL TUMOUR CHARACTERISTICS HELP US PREDICT TIME TO TUMOUR RECURRENCE?

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**Aims:** The incidence of renal carcinoma is increasing with more nephrectomies being performed. It has a high recurrence rate, with 20–30% developing metastases after nephrectomy; however information about time to recurrence is often lacking. The aim of this study was determine timescales of recurrence based on tumour characteristics.

**Methods:** Using our prospectively compiled database on radical nephrectomies, our analysis concentrated on the incidence and time to recurrence, and also tumour characteristics such as stage and grade.

**Results:** We had complete data for 205 patients.

For pT1 cancers (n = 60), the median time to recurrence was 38.5 months, for pT2 (n=41) 24 months and for pT3 (n=99) 13 months (p = 0.09). For low grade tumours (G1-2, n= 98), the median recurrence time was 42 months and for high grade tumours (G3-4, n = 106), it was 11 months, which was statistically significant (p=0.004).

**Conclusions:** This data shows that tumours with higher grade and stage are likely to recur earlier, and that higher grade tumours recur more often. This information should enable clinicians to counsel patients more accurately, and could be implemented into local diagnostic and follow-up protocols.

#### 1153: DO INTRAVENOUS UROGRAMS STILL HAVE A ROLE IN INVESTIGATING RENAL COLIC? A PROSPECTIVE AUDIT OF PRACTICE IN A DGH

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**Aims:** BAUS and NICE guidelines recommend non-contrast CTKUB for diagnosing renal calculi. This is not always possible in district general hospitals, particularly out-of-hours. We audited imaging of suspected renal colic in a DGH.

**Methods:** Prospective audit of 61 patients with suspected renal colic. Data collected included initial and subsequent imaging and delays to definitive management.

**Results:** CTKUB was first-line imaging in 26 patients (42.6%), intravenous urogram (IVU) in 19 (31.1%), ultrasound scan in 11 (18%), and plain abdominal x-ray in 5 (8.2%). Of those investigated with IVU initially, 84% were performed outside of working hours (0900-1700). 40% of patients who did not have an initial CTKUB subsequently required this for definitive diagnosis. Mean delay between initial and subsequent imaging was >19 hours resulting in an extra night hospital stay for 9 patients, with approximate additional cost to the trust of £4,500.

**Conclusions:** CTKUB has a better specificity and sensitivity than IVU for diagnosing renal calculi. Unless clinically unwell, we recommend CTKUB as first-line in all cases of suspected renal colic, with

planned re-attendance for definitive imaging if presenting out-of-hours. This should reduce additional radiation to patients, reduce delays in management and discharge, and provide additional cost-savings to the trust.

#### 1211: BARRIERS TO DECISION MAKING IN CANCER MULTIDISCIPLINARY TEAMS. ANALYSIS OF CANCER DECISION-MAKING IN TWO SURGICAL SPECIALITIES

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**Introduction:** In the UK, the multidisciplinary setting has become the standard to discuss cancer cases, yet there is no agreed way to assess the efficacy of MDT meetings (MDMs). This study investigated the factors hampering decision-making in cancer MDMs.

**Methods:** All available MDT decision outcomes of cancer patients discussed between February to December 2012 of both Urology and colorectal surgery were reviewed. MDT decisions and reasons for cases with no decision reached were analysed.

**Results:** MDT discussion outcome of 2035 cancer cases were reviewed (19 Urology MDMs, n=1126, 50 Colorectal MDMs, n=909). 9.5%(n=107) of Urology and 6.4%(n=58) of colorectal cases had no decision reached. Main reasons were: unavailability of histopathological results (47.7%(n=51) of urology and 24.1%(n=14) of Colorectal cases); unavailability of radiological investigation results (43.9%(n=47) of Urology and 43.1%(n=25) of Colorectal cases); unavailability of an Oncologist in the meeting(3.7%(n=4) of Urology and 5.2%(n=3) of Colorectal cases).

**Discussion:** This study uncovers the main barriers that MDTs face in decision-making. Assessing the efficacy of a MDT could be made by its capability to formulate a decision plan for all the cases discussed. Tackling these barriers would result in a more cost-effective process, enhance decision-making and thus enhance cancer care.

#### 1245: SURGICAL AND ONCOLOGICAL OUTCOMES FOLLOWING NEPHROURETERECTOMY IN THE MANAGEMENT OF UTCC

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**Aim:** The oncological behaviour of upper urinary tract transitional cell carcinomas UTCC is varied but more advanced disease is notoriously aggressive. We reviewed the surgical and oncological outcomes following open (ONU) and laparoscopic nephro-ureterectomy (LNU) in the treatment of UTCC at our institution.

**Methods:** Medical records and departmental databases of patients undergoing NU between 2004 and 2011 were reviewed. Complications were recorded using the Clavien-Dindo classification.

**Results:** Sixty one patients with a minimum follow up of 12 months were included (median age 71 years). Fifty six (92%) patients had LNU. Thirteen patients (21%) had post-operative complications - 8 were Grade 1 and 5 were Grade 2. Histology confirmed 53 (87%) TCC tumours and 1 (1.5%) case had inoperable UTCC disease. At median follow up of 32 months, 17 (32%) patients developed de-novo bladder TCC and 7 (13%) systemic recurrence. Overall and disease specific survival was 67% and 88% respectively. Despite 34 of 54 patients (63%) having G3 or ≥T2 disease, only 5 (9%) died of disseminated TCC and 13 (24%) died of other causes.

**Conclusion:** Our data is consistent with other similar large series' in the literature. Most deaths observed during follow-up were from competing causes rather than recurrent UTCC.

#### 1246: PAIN RELATED AND OVERALL MORBIDITY WITH TRUS GUIDED PROSTATE BIOPSY – A PROSPECTIVE STUDY

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**Introduction:** Assess analgesia requirement after trans-rectal ultrasound guided prostate biopsy (TRUS<sub>Bx</sub>) for appropriate counselling.

**Materials and Methods:** Prospectively, successive patients undergoing TRUS<sub>Bx</sub> filled questionnaires. Sextant TRUS<sub>Bx</sub> under peri-prostatic block (1% lidocaine) and antibiotic prophylaxis were performed. Pain perception was assessed using a Visual Analogue Score (VAS).

**Results:** Mean age of 405 patients was 67.5 years. Mean VAS during the procedure was 2.93 and 2.20 on reaching home. Mean maximum VAS for the cohort on day 1 and day 2 were 1.27 and 0.7 respectively. 140 (35%)

were independent with some or minimal discomfort. 14 patients required assistance for some of their basic daily needs. 9 patients (2.2%) had sepsis. 131 patients (32.4%) required additional oral analgesia following TRUSB<sub>x</sub> on days 0, 1 and 2. Mean age of these patients was 63.6 years. This group had mean VAS during the procedure of 4 and when patients reached home was 3.5. Mean maximum VAS on day 1 and 2 was 2.1 and 1.3 respectively. **Conclusion:** A third of patients require self-medicated analgesia post-procedure. Age alone cannot be used as a criterion to identify patients who will subsequently require analgesia post-procedure, but a higher VAS during the procedure may be indicative.

**1304: CHAIRING AND LEADERSHIP IN MULTIDISCIPLINARY CANCER TEAMS: DEVELOPMENT AND EVALUATION OF AN ASSESSMENT TOOL**

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**Introduction:** High quality leadership and chairing skills are vital for good performance in cancer multidisciplinary teams(MDTs), but no tools exist for assessment. Our objective was to construct a robust tool for assessment of MDT-chairing performance.

**Methods:** An observational tool was developed to assess the chairing and leadership skills of MDT chair. The tool includes 11 elements of effective MDT chairing. After it was content-validated by 10 senior MDT members, the MDT chair person was assessed by two surgeons(blinded to each other) in seven live-observed Urology MDT meetings (286 cases) and ten video recorded MDTs(131 cases) of different specialities. All chairing elements were analysed via descriptive statistics. Intraclass correlation coefficients(ICC) were used to assess inter-rater agreement and assessors' learning curves.

**Results:** The inter-rater agreement was adequate-high(ICC= 0.63-0.91) for all of the chairing elements. Agreement was higher in live MDT ratings(mean 0.79,SD 0.092) compared to video ratings(mean 0.72,SD 0.069).

**Conclusion:** an observational assessment tool can be reliably used for assessing the chair person in cancer MDTs (both in live and video-recorded). Such robust assessment tools provide part of a toolkit for MDT leadership evaluation and enhancement. The ability to feed back their performance to MDT leads can enable promotion of good practice.

**1308: HYPERTHERMIC MITOMYCIN C IN THE TREATMENT OF HIGH RISK NON MUSCLE INVASIVE BLADDER CANCER – IS IT EFFECTIVE AND SAFE? A REGIONAL CENTRE'S EXPERIENCE**

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**Aims:** High risk non muscle invasive bladder cancer (HRNMIBC) is commonly treated with intravesical BCG, but fails in approximately 50% of patients after 5 years. Hyperthermic Mitomycin C (HTMMC) is now being considered for patients who failed BCG and avoid cystectomy. Our prospective study was to investigate efficacy and tolerance of HTMMC and factors that influence success.

**Methods:** Patients with HRNMIBC who failed BCG or are immunocompromised were treated with HTMMC from June 2006 to June 2012. Induction HTMMC was given at 42+/-2oC through a Synergo device, with induction and regular maintenance courses. Every three months, cystoscopy and cytology was taken.

**Results:** Of 95 eligible patients, 75 completed at least one review. 77% of patients had a complete response with HTMMC. High grade cancer and CIS did not influence HTMMC initial response. No Clavien score over 2 was reported. Median follow up was 33 (3-78) months. At 5 years, disease specific survival was 96.8%, overall survival was 82.3% and failure-free survival was 47.6%. 14 proceeded to cystectomy on HTMMC failure, with 11 performed locally. Of the 11, all had organ-confined disease.

**Conclusion:** HTMMC is well tolerated and suitable treatment for patients who are unfit or do not wish cystectomy.

**1317: THE USE OF STAGING AND MULTIPARAMETRIC MRI IN PROSTATE CANCER – A NATIONAL SURVEY**

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**Introduction:** Current guidelines on the use of multiparametric MRI in prostate cancer are limited. Its role in diagnosing and staging prostate cancer remains a subject of debate. We designed a questionnaire to assess the

current uptake of both staging MRI prior to treatment decision, and the use of multiparametric MRI prior to initial prostate biopsy in target patients.

**Methods:** Questionnaires were handed out to healthcare professionals involved with uro-oncology MDTs. Individuals at each of the urology specialist multi-disciplinary team (SMDT) centres in England were also contacted by email, with a link to the questionnaire.

**Results:** In total, 79 responses from 57 centres were received. Of these, 46 centres reported having a protocol which defines which patients have a staging MRI prior to treatment decision. Nine centres report using multiparametric MRI prior to initial biopsy in target patient, which includes centres using this as part of a research trial or service improvement assessment.

**Discussion:** Our data suggests that the use of multiparametric MRI as an imaging modality is limited. This is in keeping with the current limited data on its value as a diagnostic tool. Further evidence is needed to assess its role within the diagnostic pathway for prostate cancer.

**1345: RADIATION EXPOSURE IN UROLOGICAL SURGERY: AN AUDIT OF CLINICAL PRACTICE**

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**Aim:** Intraoperative radiology has led to an evolving awareness of the potential risks of radiation exposure. The increased use of radiation within urology necessitates further study and this audit evaluated its use in comparison to guidelines produced by the IAEA (International Atomic Energy Agency).

**Methods:** From January to September 2012, 176 patients were identified from a retrospective review of theatre records, to have undergone one of five types of urology surgery involving radiation exposure. Procedure type, screening time and radiation dose area product were recorded, from which the effective radiation dose was calculated. Performance was reviewed and compared against IAEA guidelines.

**Results:** All five procedures were found to have used lower levels of radiation in comparison to the IAEA guidelines. Variations in radiation doses between individual urologists were identified, with a particularly wide effective radiation dose range of 0.8mSv to 1.9mSv found in the commonest procedure, ureteroscopy and laser lithotripsy.

**Conclusions:** Intra-operative radiation use at Causeway Hospital appears to be well below the levels recommended by the IAEA. Measures to continue to effectively treat urological disease whilst minimising patient radiation exposure should be introduced.

**1367: CAN TRANSPERINEAL SECTOR BIOPSY PREDICT FINAL PATHOLOGY MORE ACCURATELY THAN TRUS BIOPSY OR MRI?**

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**Objectives:** To compare the accuracy of TRUS biopsy, Transperineal sector biopsy and multiparametric MRI (mp-MRI) at predicting final pathology at radical prostatectomy.

**Methods:** A retrospective diagnostic accuracy study of patients who all had a mp-MRI, a TRUS biopsy and a transperineal sector biopsy followed by a robot assisted radical prostatectomy (RARP) at a single institution between January 2010 and December 2012. The final pathology at radical prostatectomy was compared across MRI, TRUS and TPSP.

**Results:** 104 consecutive patients were identified with a mean age 62 years (range 40-74) and a median PSA 7.9µg/L (range 0.8-40). The Gleason score at radical prostatectomy was accurate in 71% transperineal sector biopsies but only 27% TRUS biopsies. The Gleason score was upgraded in 77% TRUS biopsies compared to 16% transperineal sector biopsies.

There were 23 patients who had extracapsular extension (ECE) at radical prostatectomy but only 25% were predicted by mp-MRI. The MRI did not identify 12 patients staged at T3a and 4 patients staged at T3b.

**Conclusions:** Transperineal sector biopsy was the best predictor of final pathology. Neither TRUS biopsy nor MRI stage predicted final pathology reliably, particularly with regard to extracapsular extension, and this has implications for the use of preoperative nomograms.