Clinical Outcomes of Patients with Squamous Cell Carcinoma of the Bladder Compared with Urothelial Carcinoma with Extensive or Focal Squamous Differentiation after Radical Treatment

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Purpose: Squamous differentiation (SD) is found in up to 20% of urothelial carcinomas [1], with retrospective studies showing no clear prognostic difference compared with pure urothelial carcinoma. Clinical significance of the extent of SD also remains unclear, with recent case series suggesting that extensive SD may be associated with worse outcomes [2]. We wanted to compare outcomes of SD patients with those suffering from squamous cell carcinoma (SCC) of the bladder treated at our centre.
Methods: We retrospectively studied patients with bladder SCC or urothelial carcinoma with SD treated with radical cystectomy or radiotherapy at our centre between 2007 and 2017. Diagnostic, treatment and outcome data were collected, with patients subdivided into 3 groups: patients with SCC, with extensive (more than 50%) SD or with focal SD (less than 50%).
Results: 59 patients were identified: 28 bladder SCC patients, 10 patients with extensive SD, 11 patients with focal SD and 10 patients with no comment on SD percentage on histological reports. The most common tumour stage of patients at initial diagnosis for all groups was T2. 63.6% of patients with focal SD received neoadjuvant chemotherapy compared with 40% with extensive SD and 0% of SCC patients. 81.8% of patients with focal SD received cystectomy rather than radiotherapy, compared with 90% with extensive SD and 100% of SCC patients. 28.6% of SCC patients relapsed after definitive treatment compared with 50% of extensive SD patients and 54.6% of focal SD patients. All-cause mortality was 34.5% in the squamous group compared with 50% in the extensive SD group and 54.6% in the focal SD group.
Conclusion: We found no evidence to suggest that more extensive SD correlates with worse clinical outcomes after radical treatment, nor that SD carries better prognosis than bladder SCC. Further work is required to elucidate whether SD percentage carries clinical relevance.
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Adjuvant Radiotherapy in the Management of High Risk Penile Cancer – Outcomes from a Single Institution

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Purpose: The role of adjuvant radiotherapy within the management of high risk (extracapsular extension/N≥1) penile squamous cell carcinoma (SCC) has not been confirmed [1]. We therefore report survival outcomes for penile SCC patients treated with adjuvant radiotherapy at a single institution.
Methods: Patients with histologically proven pN+ penile SCC referred for postoperative radiotherapy at UCLH from 2010 to 2016 were identified. Patient/tumour characteristics were investigated. Survival time from radiotherapy completion date to date of death from any cause was calculated. Patients alive at the time of analysis were censored. During the study period radiotherapy practices were changing. However, all patients underwent CT planning and were treated with 1.8 Gy fractions.
Results: 19 patients were treated radically with adjuvant radiotherapy. 3 received concomitant cisplatin. 63% had grade 3 disease. 95% were N2/N3. 79% had ECE. The primary dose of radiotherapy delivered to the groin/pelvis ranged from 45 to 54 Gy with boost doses of 4–10.8 Gy (IMRT/RA or conventional plans). The median overall survival was 27 months, with a third of patients still alive at 6.5 years. There were 7 deaths recorded during the study period. 4 patients died directly as a consequence of metastatic disease. Locoregional control was achieved in 79% of patients with only one patient developing in field recurrence.
Conclusion: Within our cohort of patients treated with adjuvant radiotherapy we demonstrate prolonged survival outcomes and low within-field recurrence. Controlling local recurrence is central to reducing patient morbidity [2]. Although our cohort size is small, the patients were disproportionately high risk. ECE is an independent negative prognostic indicator [3]. The outcomes we have achieved match outcomes achieved elsewhere [4] with lower rates of local recurrence.
Further research is mandated to confirm the role of adjuvant radiotherapy, especially given the high rates of locoregional recurrence.
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Does the Reduction in Dexamethasone Used as an Anti-emetic Lead to a Reduced Incidence of Infection during BEP Chemotherapy?

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Purpose: Olanzapine when added to standard anti-emetics reduces acute and delayed nausea and vomiting. Studies have suggested that dropping dexamethasone after day 1 does not lead to reduced anti-emetic control [1,2]. Steroid use is associated with an increased risk of infection. We wanted to see whether reduced doses were associated with a reduction in infection rate in patients receiving BEP chemotherapy for germ cell tumours.
Methods: Retrospective audit of 108 patients who received BEP (cisplatin 100 mg/m^2, etoposide 500 mg/m^2 and bleomycin 90 000 units) chemotherapy from 2008 to 2017. All patients received prophylactic ciprofloxacin without filgrastim prophylaxis. 54 patients between 2008 and 2014 received dexamethasone 16 mg IV on days 1, 2 followed by 4 mg BD for 3 days in addition to ondansetron and domperidone. Patients in the second group (2014–2017) received olanzapine (5 mg BD for 5 days) and had a single dose of dexamethasone on day 1 only.
Results: 93% (50/54) of patients in the first group developed neutropenia while 20% of them (10/50) were admitted due to fevers. In the olanzapine group this was 96% and 4%, respectively ($P = 0.0149$). There was no relationship between admissions and total number of cycles received. Of the admissions for febrile neutropenia, 50% of patients were admitted on cycle 1 of treatment, 42% on cycle 3 and 8% cycle 4. There was no suggestion that anti-emetic control was compromised.
Conclusion: This audit has shown that the use of olanzapine with reduced steroid doses is associated with a reduction in the rate of febrile neutropenia admissions.
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Favourable Tumour Marker Decline Following CBOP/BEP Chemotherapy in Poor Prognosis Testicular Patients Does Not Serve as a Predictor for Improved Progression-free Survival and Overall Survival

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Purpose: Patients with poor prognosis testicular cancer [1] at the Royal Marsden Hospital (RMH) are currently treated with CBOP/BEP chemotherapy rather than BEP chemotherapy, following a phase II trial that demonstrated improved favourable response rates in patients treated with this modified regimen [2]. Favourable tumour marker decline following BEP chemotherapy, defined by the Gustav Roussy calculator [3], is associated with improved prognoses [4]. In patients with unfavourable marker decline, dose intensity chemotherapy is instituted at an earlier stage to improve prognoses. Currently, it remains unclear whether favourable tumour marker decline is predictive of improved prognosis in patients who receive upfront CBOP/BEP chemotherapy. The purpose of this study is to investigate whether favourable tumour marker decline in the CBOP/BEP population is predictive of improved prognoses.
Methods: A retrospective analysis of patients with poor prognosis testicular cancer treated with CBOP/BEP chemotherapy between 2004 and 2014 at RMH was undertaken with the use of electronic patient records. Overall survival and progression-free survival was calculated using Kaplan–Meier methods. Patients with favourable tumour marker decline were compared using the log rank test to those who had an unfavourable tumour marker decline. Surviving patients were censored at the date of last follow-up.
Results: 61 patients with a median age of 32 years were identified. They were followed-up for a median of 10.2 years. Over this period there were 29 deaths, with 3 due to treatment-related toxicity. 79% of patients had an unfavourable tumour marker decline with no significant progression-free survival or overall survival difference between patients with favourable and unfavourable tumour marker decline.
Conclusion: Unfavourable tumour marker decline in patients with poor prognosis testicular cancer is used to institute high intensity chemotherapy to improve prognoses. This study suggests that tumour marker decline may not be predictive of prognosis in patients already treated with the modified CBOP/BEP regimen.
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A 15 Year Retrospective Audit of the Incidence and Outcomes for Germ Cell Cancers Treated at the Edinburgh Cancer Centre 2000–2015

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Purpose: Testicular germ cell tumours are highly curable even when presentation is with metastatic disease. Outcomes are best when diagnosis is at an early stage as mortality increases the higher the stage at presentation. As awareness of testicular cancer has improved over time (including media campaigns), the percentage of patients with metastatic disease at diagnosis should have decreased with time. We evaluated this with a local audit – ultimately aiming to collaborate with other centres to present national data for Scotland.
Methods: 15 year retrospective audit of the incidence, histological subtype, stage, prognostic group and outcomes for all germ cell tumours treated at the Edinburgh Cancer Centre 2000–2015.
Results: In total, 979 patients were diagnosed over 15 years. The average incidence per year was 61 with $n = 40$ seminoma, $n = 21$ non-seminoma. Of the 979 patients, 204 had nodal disease at diagnosis and 52 had visceral metastases. Over this period there were 17 deaths attributable to metastatic cancer. Death rate over 15 years 1.7%. The percentage of metastases at diagnosis was highest in 2014 at 10.6%, although there were no deaths from testicular cancer in this cohort. Interestingly in 2007 9.5% had metastases at diagnosis and the percentage of deaths was 4.8%. Since 2007 the incidence of cancer-related deaths has declined and in 2014 and 2015 there were no cancer-related deaths.
Conclusion: The results of our audit demonstrate the incidence of metastases at diagnosis has not decreased over time as anticipated. In fact, the peak incidence was in 2015. Despite this finding, outcomes have improved, with the percentage of cancer-related deaths continuing to decline despite a potential increase in incidence of metastatic disease. Further evaluation is now being undertaken to assess in detail the prognostic groups and compare the treatment regimens to assess if these explain the improved outcomes.

Development of a Multi-professional Testicular Cancer Patient Follow-up Clinic – Experience from the Royal Marsden Hospital

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Purpose: Testicular germ cell tumours (GCT) are the most common cause of cancer in men aged between 15 and 40 years. Although most patients can expect to be cured, there is a high risk of relapse. Salvage treatments can cure up to 50% [1] of these patients; therefore a robust follow-up schedule is necessary. The aims of this study were to evaluate:
(1) Local follow-up practice against nationally published evidence-based guidelines [2];
(2) Proportion of patients with disease relapse;
(3) Requirement for a specialist nurse led clinic.
Methods: A retrospective analysis of testicular GCT patients reviewed by a doctor either in clinic or as a telephone consultation between March and April 2017 at The Royal Marsden Hospital was performed. Patients were excluded if receiving chemotherapy or radiotherapy. Patient characteristics, reason for attendance, clinical outcome, last treatment date, history of recurrence and clinical trial involvement were collated from electronic patient records. Patients beyond 5 years from treatment for stage I seminoma and beyond 2 years for all other stages were documented as potential patients for nurse-led follow-up.
Results: 220 patients (124 non-seminomatous GCT, 95 seminoma, 1 Sertoli cell tumour) from 230 outpatient and 33 telephone consultations were included in the analysis. Median (IQR) follow-up from treatment was 26.5 (9.75–66) months. The majority of patients (93.8%) attended as per protocol; 46 (20.9%) patients had disease recurrence since treatment, with median (IQR) time from initial treatment to first recurrence of 11.5 (6–44.7) months, nurse-led follow-up was considered suitable for 75 (28%) of the consultations
Conclusion: The median time to recurrence was within 2 years from treatment, supporting the robust follow-up process. A nurse-led telephone clinic after 2 years of follow-up could help reduce pressure on doctor-led clinics and support long-term follow-up. A proforma has been developed for this to be integrated into clinical practice and patient and staff feedback from this initiative will be collected.
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Real-world Experience of Cabozantinib in Patients with Metastatic Renal Cell Carcinoma and Cost Saving from Free-of-Cost Access Scheme

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Purpose: Cabozantinib is a multi-targeted tyrosine kinase inhibitor, approved for treatment in advanced renal cancer carcinoma (aRCC) patients who had prior anti-angiogenic agents. Cabozantinib was provided free-of-cost through a managed access programme (MAP) in Scotland from October 2016 until SMC approval in June 2017. We aim to evaluate outcomes with cabozantinib and identify potential cost savings from participation in the MAP.