7168 POSTER

Health Related Quality of Life (QOL) Assessment in Stage 1 Seminomatous Germ Cell Tumour Patients Treated With Either Adjuvant Carboplatin Chemotherapy, Adjuvant Radiotherapy or High Intensity Chemotherapy

J. Lewin[1], A. Haydon[2], J. McKendrick[1], J. Millar[2], M. Schwarz[2], J. Shapiro[3]. [1]*Box Hill Hospital, Dep of Medical Oncology, Melbourne, Australia;* [2]*Alfred Hospital, Dep of Medical Oncology, Melbourne, Australia;* [3]*Cabrini Hospital, Dep of Medical Oncology, Melbourne, Australia*

Background: Treatment options for patients (pts) with stage 1 seminoma post orchidectomy include adjuvant chemotherapy (carboplatin), adjuvant radiotherapy (RT) or observation and, if relapse, high intensity chemotherapy (BEP). Cure rates are similar across the 3 options and hence morbidity and QOL concerns are major factors in determining treatment.
Methods: A retrospective questionnaire was sent to stage 1 seminoma patients who completed adjuvant carboplatin treatment (1 or 2 cycles) or adjuvant RT between the years 2003–2010. A surveillance arm and subsequent relapse was replicated via selecting patients receiving high intensity chemotherapy from non-seminomatous tumours (BEP regimen). QOL questionnaires were completed via mail (based on EORTC QLQ-C30). QOL was assessed by comparing symptoms at time of initial adjuvant treatment with current symptoms. Further domains were assessed including time off work, hospital admissions, medical appointments and time to return to 'normal' self.
Results: 164 pts were identified over 3 hospitals (2 public, 1 private). Preliminary data shows significantly fewer days off work in the carboplatin and RT arm compared to BEP (13.50 vs 14 vs 150). Pts receiving BEP had the highest amount of hospital admission rates, medical appointments in the first year of treatment and days in bed post-treatment. Pts receiving carboplatin had the least. Pts subjective experience of returning to 'normal' self occurred earlier in the carboplatin arm ($4\frac{1}{2}$ months) compared with BEP (11 months) and RT (17 months). QOL was similar in carboplatin and RT arm but RT was associated with higher gastrointestinal complaints at time of treatment (poor appetite, vomiting, diarrhoea). Pts treated with either carboplatin or RT had superior QOL compared to pts treated with BEP, although this returned to normal once treatment was completed. We will present completed data at the meeting.
Conclusion: Preliminary analysis reveals a large subjective improvement in returning to 'normal' self in the carboplatin arm. Patients receiving carboplatin also had less days off work, fewer hospital admissions and the least amount of medical appointments in the first year compared to RT and BEP. QOL is similar whether receiving carboplatin or RT, but superior to receiving BEP.

7169 POSTER

Study of Dynamic Contrast-enhanced Ultrasound (DCE-US) for the Early Evaluation in Patients Included in Phase II Treated With TKI 258 in Renal Cell Carcinoma

N. Lassau[1], G. Aboud[1], S. Koscielny[2], B. Benatsou[1], E. Angevin[3], B. Escudier[3]. [1]*Institut Gustave Roussy, Imaging Department, Villejuif, France;* [2]*Institut Gustave Roussy, Biostatistic Department, Villejuif, France;* [3]*Institut Gustave Roussy, Medical Department, Villejuif, France*

Background: To determine the best timing for the early assessment of a functional parameter calculated with DCE-US in order to rapidly distinguish poor responders from good responders among patients treated with TKI 258 in phase II.
Materials and Methods: All patients had an examination just before the start of TKI 258 (D-1) and at D7, D14, D 30, D 60 and D 120. Each examination included a bolus injection of 4.8 ml of Sonovue (Bracco®) and raw linear data were recorded over 3 minutes with an Aplio (Toshiba). The raw linear data were analyzed with a mathematical model (patent PCT/IB2006/003742) to evaluate one parameter (the area under the curve (AUC) correlated with the blood volume) characterizing the tumour perfusion curve. Response to treatment was evaluated with RECIST criteria with scanographic evaluations. Complete or partial responses and stabilization were classified as successes and progression as treatment failure.
Results: A total of 7 patients were included for the DCE-US evaluation. According to RECIST criteria, the median time to event of 3 poor responders was 4 months and the time to event of the 4 good responders was always more than 12 months. 36 DCE-US examinations were performed. Among good responders: The median variation in the AUC between baseline and D7, 14, 30, 60 and D 120 was −85%, −55%, −77%, −59% and −81% respectively.
Conclusions: Our results confirm the interest of DCE-US for monitoring TKI 258 in metastatic RCC. The dramatic decrease in the AUC started from D7 after the beginning of treatment.

7170 POSTER

Modifiable Obstacles to Early Treatment of Testicular Germ Cell Tumours

T. Buchler[1], M. Kupec[1], Z. Donatova[1], M. Foldyna[1], J. Kanakova[1], J. Hornova[1], K. Vecerova[1], D. Klimes[2], J. Abrahamova[1]. [1]*Thomayer University Hospital and Charles University 1st Faculty of Medicine, Department of Oncology, Prague, Czech Republic;* [2]*Masaryk University, Institute of Biostatistics and Analyses, Brno, Czech Republic*

Background: Early diagnosis of TGCTs could potentially limit the exposure of patients (pts) to chemotherapy and/or radiotherapy with their long-term complications. We have retropectively studied the impact of delayed diagnosis of TGCT on the initial stage of the disease and the outcome of first-line therapy.
Patients and Methods: We have analysed a cohort of 136 pts. The median age was 33 years (range 17−63 years), 59 pts (43%) had diagnosis of seminoma and 77 (57%) were diagnosed with nonseminomatous TGCT. Pts were subdivided according to TNM stage and current treatment recommendations as follows: disease limited to testis (TNM stage IA and IB; n = 71 [52%]), early metastatic disease (TNM stages IS, IIA and IIB; n = 35 [26%]), and advanced metastatic disease (TNM stages IIC or higher; n = 30 [22%]). Statistical analysis was carried out using nonparametric tests including Kruskal-Wallis ANOVA and the median test.
Results: Median time from the onset of symptoms to first urology appointment was 31 days (range 0–398 days). Median time from first urology appointment to diagnostic surgery (orchiectomy in most cases) was only 3.5 days (range 0–177 days) and the median time from surgery to chemotherapy/radiotherapy (when applicable) was 32 days (11–119 days). Delayed first urology appointment was associated with higher stage at presentation ($p = 0.001$), increased probability of regional lymph node involvement ($p = 0.004$) and metastatic disease ($p = 0.005$), but not with T or S stage at presentation. There was a trend to earlier presentation in patients with nonseminomas as compared to seminoma patients. No significant associations were found between delayed presentation and age or education of patients, year of diagnosis, and presenting signs/symptoms. The probability of achieving complete response to first-line treatment was lower in pts presenting later ($p = 0.04$) but the difference had only trending statistical significance if the analysis was limited to patients in stage II or higher.
Conclusions: Delayed presentation of patients with TGCTs is associated with higher stage at diagnosis and reduced probability of achieving complete response to first-line treatment. According to current guidelines, this upward shift of initial clinical stage translates into more aggressive treatment regimens.
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7171 POSTER

Hypogonadism in Long-term Survivors After Testicular Cancer and Malignant Lymphoma

C.E. Kiserud[1], S.D. Fosså[1], A.A. Dahl[1]. [1]*Oslo University Hospital, Departement of Clinical Cancer Research, Oslo, Norway*

Background: Chemotherapy and radiotherapy may lead to impaired gonadal function. The aim of this study was to compare gonadal function in male survivors after treatment for testicular cancer (TCSs) and lymphoma (LSs). The hypothesis was that hypogonadism would be more pronounced in TCSs compared to LSs due to inherent biological weakness of the remaining testicle.
Patients and Methods: The study included assessment of gonadal hormones (testosterone, SHBG [sex-hormone binding globulin], LH [Luteinizing hormone] and FSH [Follicle stimulating hormone]) and responses to questionnaires in TCSs (n = 1117) and male LSs (n = 259) diagnosed in 1980–1994 (TCSs) and 1980–2002 (LSs). Data collection with assessment of gonadal hormones were performed in 1998 (TCSs) and 2007 (LSs).
The patients' hormone levels were separated into two groups: 1) Normal (Testosterone: 9.0–31.0 nmol/l, LH < 10.0 IU/L, FSH < 12.0 IU/L), and 2) Hypogonadal (Testosterone <9.0 nmol/l, and/or LH >10.0 IU/L, and/or FSH >12.0 IU/L). Treatment was separated into three groups according to expected gonadotoxicity: low, medium and highly toxic treatments. Logistic regression analyses were used to explore variables associated with hypogonadism in uni-and multivariate analyses with $p < 0.05$ considered significant. Variables significantly associated with hypogonadism in univariate analyses were included in the multivariate model.
Results: Significant differences were observed between LSs and TCSs concerning age at survey and observation time [mean age at survey: LSs: 48.2 versus TCSs: 44.6 years, ($p < 0.001$), mean observation time: LSs: 15.1 versus TCSs: 11.0 years, ($p < 0.001$)]. Among LSs 133 (51.4%) and among TCSs 543 (48.6%) were hypogonadal ($p = 0.43$). Increasing age, increasing observation time, increasing treatment intensity, increasing total