

**C48****The long-term side effects of adjuvant radiotherapy vs carboplatin chemotherapy in clinical stage A seminomatous testicular tumors**

D. Argirovic<sup>1\*</sup>, L. Jelic-Radosevic<sup>2</sup>, A. Argirovic<sup>3</sup>. <sup>1</sup>*Clinic of Urology, Outpatient Clinic Argirovic, Urology, Belgrade, Serbia;* <sup>2</sup>*Institute of Oncology and Radiotherapy, Radiotherapy, Belgrade, Serbia;* <sup>3</sup>*KBC Zemun, Urology, Belgrade, Serbia*

**Introduction and Objectives:** Radiotherapy (Rtx) is associated with an increase risk of 2<sup>nd</sup> cancer and cardiovascular disease (ds). Because of difficulties in detecting recurrences on surveillance who can occur out to 10 years (y) this institution has introduced carboplatin (CBDCA) chemotherapy (CT) as the treatment of patients (pts) in clinical stage (CS) A seminomatous testicular tumors (STT) and this study analyze late events in these 2 cohorts.

**Material and Methods:** Between 1982 and 2005, 545 pts in CS-A STT were randomized to receive either Rtx (n=315) (TD 30Gy) (Arm A) or 2 cycles of CBDCA CT (400 mg/sqm/q 3 wks) (Arm B) (n=230).

**Results:** Arm A – overall relapse rate (ORR) occurred in 13 pts (14.1%) with late relapse (LR) in 4 pts (1.3%) within median free interval (MFI) of 31 months (m). CR following applied therapy in relapse is achieved in 3 pts (75%). 10 pts (3.2%) developed metachronous GCT within MFI of 6.5 y (3 pts had discordant histology, 6 pts underwent surveillance). Late sequels were observed in 24 pts (7.6%): gastric ulcer (2), gastritis (3), ileus (2), dyspepsia (2), myelopathie (1), myelosuppression (1) cardiovascular disturbances (3) and fibrosis within Rtx fields (7). 9 pts (2.9%) developed 2<sup>nd</sup> malignancy within MFI of 5 y: lung cancer (3), lung cancer/non-Hodgkin lymphoma (1), gastric cancer (1), thyroid cancer (1), bladder cancer (1), melanoma (1), ureteral tumor (1). At MFU of 12 y, DSS is achieved in 95.2% pts. Overall mortality rate was 4.8% (1.3% from GCT, 1.9% from 2<sup>nd</sup> malignancy and 1.9% from other causes). Arm B – ORR was 2.6% with LR in 2 pts (0.9%) within MFI of 31 m. All relapsing pts achieved CR with cisplatin-based CT. Metachronous GCT occurred in 4 pts (1.7%) within MFI of 20.25 m (3 pts had discordant histology, organ preserved operation is performed in 3 pts, surveillance in 3 pts). At MFU of 7 y (38 >10 y, 138 >5 y), DSS was 100%, 1 pt (0.4%) died from lung cancer at 28 m and 1 pt died of cardiovascular disorders at 45 m.

**Conclusions:** The numbers of cases were too small to be absolutely confident of these figures. However, this data strongly suggests that there are no excess of cancer or cardiovascular deaths in the single agent CBDCA cohort.

**C49****The management of nonseminomous germ cell tumors of testis (NSGCT) stage I with stable increase of tumor markers**

A.V. Sakalo<sup>1\*</sup>, P.G. Yakovlev<sup>2</sup>, S.V. Samojlenko<sup>3</sup>. <sup>1</sup>*Institute of Urology of Ams of Ukraine, Dept. of Oncology, Kiev, Ukraine;* <sup>2</sup>*Kiev Municipal Oncology Hospital, Dept. of Urology, Kiev, Ukraine;* <sup>3</sup>*Kiev Municipal Oncology Hospital, Dept. of Clinical Immunology, Kiev, Ukraine*

**Introduction and Objectives:** The optimal treatment regimen for patients with NSGCT stage I with stable increase of alfa-fetoprotein (AFP) and beta-chorionic gonadotropin (b-CHG) after unilateral orchiectomy has not been finally developed.

**Material and Methods:** From 1998 through 2008 we have followed up 219 patients with NSGCT stage I. In 42 patients (19.2%) after unilateral orchiectomy the markers increased: in 5 patients only AFP increased, in 32 – b-CHG increased, and in 5 patients both markers rose. The length of follow up comprised 6–126 months (median 36 months). In all patients after unilateral orchiectomy the retroperitoneal lymph node dissection had been performed (RPLND).

**Results:** In 10 out of 32 patients with increased level of b-CHG the retroperitoneal lymph nodes were affected with metastases. In eight patients (25%) the disease progressed in 3–60 months after RPLND. Only in 1 out of 5 patients with increased level of AFP the lymph nodes were affected with metastases. The disease recurred in all 5 patients in 2–12 months after RPLND. Among 5 patients in whom both markers were elevated one patient had been diagnosed with metastasis of embryonic cancer. The disease recurred in 4 patients in 2–14 months after RPLND. In 14 patients among 17 in whom the disease recurred are in complete clinical remission after the course of adjuvant chemotherapy (ChT) during 24–60 months, one patient survives with metastases, and two patients died.

**Conclusions:** We conclude that stable elevation of each or both tumor markers after unilateral orchiectomy in patients with NSGCT stage I is associated with presence of hidden metastases. The treatment of choice in these patients is ChT till tumor markers get normal.

**C50****Testicular tumour – a review of management**

A. Hameed<sup>1\*</sup>, B. White<sup>2</sup>, N. Al Saffar<sup>3</sup>. <sup>1</sup>*The Royal London Hospital, Dept. of Urology, London, United Kingdom;* <sup>2</sup>*Teesside University, School of Health, Middlesbrough, United Kingdom;* <sup>3</sup>*Ayr Hospital, Urology, Ayr, United Kingdom*

**Introduction and Objectives:** Testicular cancer is one of the few solid cancers that can be cured in the majority of cases even when it is metastasized with overall survival rate 89.3%.

**Aim:** To establish the age adjusted incidence of testicular cancer.

To critically assess the management of testicular tumour (diagnostic, Medical and surgical Aspects) in a tertiary referral centre covering an area with a population catchments of more than 300000 and in-line with the applied clinical guidelines.

**Material and Methods:** It is a retrospective study, 109 cases are included, representing all those who underwent orchidectomy for the period from 2002–2005, no age group is specified. Complete review of pathology types, cancer staging, management plans and follow up plans.

**Results:** This study has concluded that there is no substantial difference between the crude and the age standardised incidence, moreover no difference from the reported crude incidence by the Scottish intercollegiate guidelines. All patients were seen with 1–2weeks from referral. In terms of tumour types we found (55.1%) seminoma, (14.28%) Non-seminoma and (30.61%) combined (seminoma and non seminoma).

Stage I disease in 61.22% of cases, stage II in 36.73% of cases stage IV in 2.04%cases. Most of the cancers were in the age group (20–50) with the majority (48.97%) in the age group (31–40). 42.85% of cases were identified with high tumour markers; out of these: Alpha fetoprotein was high in 14.28% of cases; Beta HCG was high in 16.32% of cases and both reported as high in (12.24%) of cases and one case was not reported. In terms of pre orchidectomy ultrasound, (2.12%) of cases reported as inflammatory area, (4.25%) of cases reported as cystic area with (8.16%) of cases did not have ultrasound scan before their orchidectomy with the rest reported suspiciously. C.T. Scan was performed 2–3 weeks post orchidectomy in 100% of cases.

Higher percentage of seminoma at stage II (40.74%) compared to the internationally published percentages. Only 2% of cases had scrotal orchidectomy with the rest all had radical inguinal orchidectomy. All stage management were compliant with the guidelines understudy except for stage I mixed cell tumour were surveillance was utilised as initial management option for cases which require more aggressive action and that did lead to cancer relapse.