Conclusion: In our series of IBC, C followed by ACT has been associated with a reduction in the risk of relapse and death, particularly in patients with extravesical disease or N+.

7168 POSTER

Prognostic factors for survival in patients (pts) with metastatic nonseminomatous germ cell tumors (mNSGST) relapsed after modern induction chemotherapy (CT)

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Purpose: Despite high efficacy of induction platinum-based CT, 20−30% pts with mNSGCT relapse and only minority of them might be cured. There is no commonly used prognostic classification for relapsed mNSGST like IGCCCG classification for CT-naive pts. The aim of this study was to define prognostic factors for survival in mNSGST pts relapsed after platinum+etoposide-based induction CT.
Patients and Methods: We analyzed data of 698 CT-naive pts with advanced NSGCT who had been treated in our department from 1986 to 2006 with etoposide- and cisplatin-based regimens (EP, BEP, C-BOP-3BEP and T-BEP) followed by resection of residual tumors. With median follow-up time 32 (range, 3−215) months 181 (26%) pts had relapsed. Pts with mature growing teratoma syndrome were not included in the analysis. The salvage CT was administered to 138 pts, 71 (51.7%) of them were treated with ifosfamide-cisplatin-based conventional CT (VeIP, TIP or VIP regimens). Multivariate step-wise Cox' regression analysis was performed to determine prognostic factors in the 71 relapsed pts treated with ifosfamide-cisplatin-based CT.
Results: The 5-year overall survival (OS) rate for pts treated with ifosfamide-cisplatin-based CT was 32% (95% CI, 25−41%). In the univariate analysis, following negative factors were determined: initial poor IGCCCG prognostic group, mediastinal primary tumor, morphology of primary tumor (yolk sac tumor), AFP level $\geqslant$10,000 U/ml and LDG level $\geqslant$1.5 ULN before induction CT, absolute cisplatin-refractory relapse, progression-free interval $\leqslant$ 2 years and LDG level $\geqslant$2 ULN at relapse. Four prognostic factors remained in the multivariate analysis: morphology of primary tumor (yolk sac tumor), LDG level $\geqslant$1.5 ULN before induction CT, absolute cisplatin-refractory relapse, LDG level $\geqslant$2 ULN at relapse. According the analysis pts could be classified into three prognostic groups. Good prognostic group (no negative factors) – 10/71 (14%) pts, 3-year OS – 100%. Intermediate prognostic group (1 negative prognostic factor) – 33/71 (46.5%) pts, 3-year OS – 50.2%. Poor prognostic group – ($\geqslant$2 negative prognostic factors) – 28/71 (39.5%) pts, 3-year OS – 6.7%.
Conclusion: Our classification allows dividing pts with relapsed mNSGCT into groups with different prognosis. This way of stratification is urgently needed for further trials. New regimens of salvage CT is demanded for pts with poor prognosis.

7169 POSTER

Association of preoperative sodium concentration with prognosis in renal cell carcinoma

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Background: Renal cell carcinoma has a variable natural history, and determining individual prognosis is important to guide management. A single recent report in a small UK series suggested that pre-operative hyponatremia might be a prognostic factor in renal cell carcinoma. We aimed to validate this finding in an external series of patients from a single Asian centre.
Methods: We retrospectively analyzed a series of patients undergoing nephrectomy for newly diagnosed RCC between 1991 and 2008. Clinical, pathologic, and laboratory data were recorded in each case.
Results: A total of 447 RCC patients formed our study population, with a median survival of 41.2 months. It was found that cancer specific survival correlated well with pre-operative sodium levels (HR 2.06, 95% CI 1.31−3.22, p = 0.001 by log-rank testing), with 5-year survival estimates to be 71.0% (95% CI 64.5−75.4) and 82.8% (95% CI 79.1−85.9) respectively, with poorer prognosis predicted in patients with relative hyponatremia. This same relationship can be seen using the outcomes of overall survival (p = 0.003) as well as disease-free survival in patients with non-metastatic disease (p = 0.069). Multivariate analysis showed that the effect of sodium levels was independent of clinical staging (HR 1.74 95% CI 1.11−2.73, p = 0.016). This was also seen with reference to other variables such as pre-operation serum creatinine levels, histological grade and ECOG performance status.
Conclusions: We confirm that a pre-operative serum sodium level is an independent prognostic factor in an external Asian series of RCC patients. We are currently conducting analysis to elucidate the cause of the hyponatremia.

7170 POSTER

Clinical practice guideline impact on referral and treatment rates of neoadjuvant chemotherapy for muscle-invasive bladder cancer: a comparative analysis between two Canadian tertiary care centres

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Background: Level I evidence recommending neoadjuvant chemotherapy (CT) for muscle invasive bladder cancer exists. A Clinical Practice Guideline (CPG) was developed in Alberta, Canada based on this evidence. The primary objective of the current study was to examine the impact of this CPG on referral rates and treatment-offered rates for patients with muscle invasive bladder cancer. We then assessed the degree to which two tertiary health centres in the province of Alberta differed with respect to CPG uptake. Secondarily, the impact of neoadjuvant CT on pathologic response of the disease was examined.
Methods: The study was a retrospective cohort analysis of pooled data from patients who underwent radical cystectomy (RC) for presumptive clinical stage $\geqslant$ T2 bladder cancer at two tertiary care centres in Alberta. Patients receiving care within a 5-year period encompassing the CPG release date were identified and separated into one of two cohorts (pre-CPG [n = 129] from 2.5 to 0.5 years before the release, and post-CPG [n = 107] from 0.5 to 2.5 years after the release). Referral to medical oncology and actual treatment rates were ascertained for each cohort in each of the two centres. Rates of pathologic response among the RC only group and CT plus RC group were also analyzed.
Results: Referral to medical oncology for neoadjuvant CT occurred in 2 out of 129 (1.5%) patients and 23 out of 107 (21.5%) patients in the pre- and post-CPG groups, respectively (RR 13.9, 95% CI 3.3 to 57.5, p < 0.001) with a difference of 6% and 25% between centres. Neoadjuvant cisplatin and gemcitabine (CG) CT was offered to 0 out of 2 (0%) patients and 18 of 23 (78.3%) patients in the pre- and post-CPG groups, respectively (p = 0.02) with a difference of 0% and 7% difference between centres. Four out of 13 (30.6%) patients and 12 out of 223 (5.4%) patients who received neoadjuvant CT plus RC and RC alone, respectively, had a complete pathologic response (pT0) (p < 0.001). Pathologic downstaging (ie, pT < cT) occurred in 8 out of 13 (61.5%) patients who received combined therapy compared to 52 out of 223 (23.3%) patients who had RC alone (p = 0.002).
Conclusions: Referral and treatment-offered rates improved significantly after the release of the CPG. However, these rates are low. The uptake of the CPG between the two tertiary centres varied considerably, indicating a non-uniform and incomplete dissemination of the guideline. The pT0 rate of the CG regimen used in this study was comparable to existing data using a methotrexate, vinblastine, doxorubicin, and cisplatin regimen.

7171 POSTER

Chemoradiotherapy with cisplatin (C) and gemcitabine (G) plus concurrent irradiation (XRT), for the conservative treatment of invasive transitional bladder cancer (ITBC) patients – clinical outcome and long term follow-up in a monoinstitutional experience

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Background: C and G have synergistic activity when used in combination and are both potent radiosensitizers. In a dose finding trial, conducted in our hospital on 16 T2−4 N0 ITBC patients using C and G combined with concurrent XRT, after maximum transurethral resection, the maximum tolerated dose (MTD) of G was 400 mg/sqm (IJROBP 2003; 57: 1310−16). On this basis, we have designed a formal multi-institutional phase II trial, in order to confirm the promising results observed in the previous study. The trial however, was prematurely closed, due to low accrual, so we have