

grade II to I, 6 from grade II to 0, 2 from grade I to 0 and 1 from III to II), whilst in one patient there was deterioration. Response was graded as significant (complete or near complete resolution of symptoms) in 16 patients, moderate (partial but noticeable improvement) in 9 and no response (minimal or no improvement) for 4. For those patients that received Alfuzosin during RT for more than 2 weeks, this response was maintained in 16 patients, but was not maintained in 4 patients. Multivariate analysis showed an association of response with prostate volume ($p = 0.041$).

Conclusion: This study confirms that alfuzosin significantly reduces LUTS arising during RT for prostate cancer, and may also improve QoL. This data supports further investigation with a randomized alfuzosin versus placebo study in patients undergoing radical RT for prostate cancer.

868

POSTER

Chemotherapy for teratoma with malignant transformation

O. El Mesbahi¹, C. Theodore¹, C. Rebischung¹, D. Vanel², P. Validir³, K. Fizazi¹. ¹Gustave Roussy, Department of Medecine, Villejuif, France; ²Gustave Roussy, Department of Radiology, Villejuif, France; ³Institut Mutualiste Montsouris, Department of Pathology, Paris, France

Background: Germ cell tumors (GCT) with a non GCT malignant component is a rare phenomenon called teratoma with malignant transformation (TMT). In the literature, the largest series of patients (pts) with TMT treated with chemotherapy comprises for 12 pts (J Clin Oncol 2003, vol 21, No 23). We report our experience of chemotherapy in 14 patients with TMT.

Patients and methods: Sarcoma was the most frequent histologic type of TMT, identified in 9 pts, with rhabdomyosarcoma ranking first among the subtypes (4/9). Other histological types included adenocarcinoma (4) and bronchoalveolar carcinoma (1). Chemotherapy was administered to 14 pts with TMT, including 10 with measurable disease. Each patient received chemotherapy regimens based on the specific malignant cell observed in the transformed histology.

Results: 7/10 pts with measurable disease achieved a partial response, with the duration of response ranging between 4 and 17 months. Two patients did not respond to treatment and one patient had stable disease. All pts with sarcoma-containing TMT received a cisplatin-doxorubicin based chemotherapy. 9 pts had a resection of residual masses. With a median follow-up of 72 months, 4/14 pts (%) are alive, including 3 who are disease-free.

Conclusion: This is by far the largest reported European experience of chemotherapy in TMT. Although TMT has a poor prognosis compared to GCT, its management may be improved by adapted chemotherapy associated with surgical resection of residual masses.

869

POSTER

Prognostic significance of early predicted time to normalization (TTN) of tumor markers in advanced nonseminomatous germ cell tumors (NSGCT): validation study

A. Tryakin¹, S. Tjulandin¹, D. Titov¹, T. Zakharova², K. Figurin³, A. Mitin³, I. Fainstein⁴, A. Garin¹. ¹N. N. Blokhin Russian Cancer Research Center, Clinical Pharmacology and Chemotherapy, Moscow, Russian Federation; ²N. N. Blokhin Russian Cancer Research Center, Patomorphology, Moscow, Russian Federation; ³Cancer Research Center, Urology, Moscow, Russian Federation; ⁴Cancer Research Center, Radiosurgery, Moscow, Russian Federation

Purpose: K. Fizazi et al. have shown the decline rate of serum AFP and hCG during the first 3 weeks of chemotherapy (CT) predict the outcome in NSGCT pts with poor-prognosis (JCO, Vol.22 (19), 2004). In our validation study we retrospectively studied the prognostic relevance of early predicted TTN in advanced NSGCT.

Patients and methods: During 1984–2002, in the study were included 312 NSGCT chemotherapy (CT)-naïve pts with known tumor markers levels at the beginning of first and second cycles of CT. They were treated with modern cisplatin-etoposide-based CT in our department. Decline rates were calculated using a logarithmic formula and expressed as TTN. Pts with both TTN of AFP <9 wks and hCG <6 wks were defined as favorable group.

Results: Median f.-up time was 36 (range, 12–156) months. Progression-free survival (PFS) and overall survival (OS) were similar in good and intermediate IGCCCG groups irrespective of predicted TTN. In poor prognostic group there was a trend of worsening in 3-years OS in pts who had unfavorable TTN (50%) than favorable TTN (71%, $p = 0.11$). Separate analysis of prognostic relevance of TTN AFP and hCG shown that only unfavorable TTN of AFP predicted lower OS in poor prognostic group in comparison with favorable TTN – 42% and 65% ($p = 0.016$), respectively.

According to IGCCCG prognosis OS was entirely identical in pts with favorable or unfavorable TTN of hCG.

Conclusions: The analysis showed that decline rates of AFP but not hCG during the first 3 weeks of CT predict outcome in NSGCT pts with poor-prognosis according to the IGCCCG.

870

POSTER

A pilot study: potential role of nutrient vitamin D in prostate cancer patients with rising PSA after definitive therapy

R. Choo¹, T. Woo², R. Veith³, M. Jamieson². ¹Mayo Clinic, Radiation Oncology, Rochester, Minnesota, USA; ²Toronto Sunnybrook Regional Cancer Centre, Radiation Oncology, Toronto, Canada; ³Mount Sinai Hospital, Pathology and Laboratory Medicine, Toronto, Canada

Objective: To assess the effect of nutrient vitamin D (cholecalciferol) on the rate of PSA rise and PSA levels in prostate cancer patients with rising PSA after definitive therapy. Optimal management for patients with PSA relapse alone (with no evidence of distant metastasis or local progression) after surgery and/or radiotherapy remains uncertain. Although androgen ablation (AA) has been traditionally the standard treatment for these patients, there are several concerns related to implementing AA in earlier stage of PSA relapse. These include: 1. a finite duration of effectiveness and potentially significant side effects of AA. 2. no randomized study suggesting the benefit of immediate AA for PSA relapse alone, compared with delayed application at the time of clinical evidence of tumor progression. Thus many clinicians choose to observe asymptomatic patients with PSA relapse alone. On the other hand, it is distressful to a patient to be idle in the presence of rising PSA. Therefore it is desirable to have an agent with low toxicity that can inhibit or decrease the rate of tumor progression before consideration of AA. Vitamin D may be such an agent.

Methods: A prospective, single arm, study. Fifteen asymptomatic patients (median age: 68) with PSA relapse alone after surgery and/or radiotherapy were treated with simple, nutritional vitamin D 2000 IU per day orally. All had an evidence of PSA relapse with at least 3 successive PSA rises over a minimum of 9 months after definitive therapy. Patients were followed every 2–3 months for PSA levels and toxicity. The rates of PSA rise and absolute PSA levels were compared between before and after the initiation of vitamin D.

Results: Median follow-up after the start of vitamin D was 8 months (range:4–21). 8/15 had a decrease in PSA (sustained from 5 to 17 months) after the start of vitamin D. In one additional patient, PSA levels fluctuated around the baseline for 21 months. After the start of vitamin D, 14/15 had a decrease in the rate of PSA rise, which was statistically significant ($p = 0.005$). PSA doubling time increased from a median of 14.3 months before vitamin D to 25 months after vitamin D. None had side effects from vitamin D.

Conclusion: Simple, nutrient vitamin D appears an effective agent that can moderate the rate of PSA rise, which may suggest the retardation of tumor progression. This was achieved with very low cost (\$2.00/month) and no adverse effects. A confirmatory study is needed.

871

POSTER

Urinary ICAM-1 levels can predict response in superficial bladder cancer treated with intravesical immunotherapy

I. Zoumpas¹, S. Touloupidis², T. Galaktidou³, A. Kortsaris⁴, K. Simopoulos², V. Katsikas¹. ¹Aristotle University of Thessaloniki, 2nd Department of Urology, Vasilika Thessalonikis, Greece; ²Democritus Thrace University, Urology, Alexandroupolis, Greece; ³Theganeion Cancer Hospital, Virology Laboratory, Thessaloniki, Greece; ⁴Democritus Thrace University, Biochemistry Laboratory, Alexandroupolis, Greece

Aim: The present study investigated the value of urinary ICAM-1 as a prognosticator of response in patients with superficial bladder cancer treated with different immunotherapeutic modalities.

Material and methods: 34 patients with histologically proven superficial recurrent bladder cancer (except carcinoma in situ) were included in the study. The patients received intravesical instillations of bacillus Calmette-Guérin (BCG), interferon- α -2b and interferon- γ -1b. Three fresh-voided urine specimens were collected from every patient at each instillation; one before the instillation, one 12 hours after the instillation and one 24 hours after the instillation. ICAM-1 measurements in the urine were performed using a commercially available enzyme-linked immunosorbent assay (ELISA) kit. Response to treatment was evaluated with cystoscopy and routine urine cytology every 3 months for a period of 12 months. Patients without evidence of recurrence were considered as responders, whereas those with recurrent disease were considered as non-responders.

Results: Mean urinary soluble ICAM-1 levels at each instillation were calculated from the three pertinent measurements. Concentrations in the