890 PUBLICATION

Combination chemotherapy in androgen-independent metastatic prostate cancer. A phase II study with docetaxel and ifosfamide

P. Kellokumpu-Lehtinen, P. Hervonen. *Tampere University Hospital, Oncology, Tampere, Finland*

Background: The aim of the trial was to study the efficacy and toxicity of docetaxel – ifosfamide combination chemotherapy in chemotherapy-naive patients with androgen-independent metastatic prostate cancer.
Material and methods: 31 patients with androgen-independent metastatic prostate cancer were enrolled to receive first-line chemotherapy consisting of 40–60 mg/m^2 docetaxel given as a 1-hour infusion followed by 3.0 g/m^2 ifosfamide given as a 24 hours-infusion every 3 weeks with 500 mg mesna administered intravenously at the start of the ifosfamide infusion and 4 and 8 hours later. The maximum duration of chemotherapy was 6 cycles. Mean age was 70.2 years (range 58–77).
PSA responses were determined according to AUA guidelines and all toxicities, time to progression and overall survival were recorded according to NCI criteria.
Results: The objective PSA response rate was 32% in 11 of 31 patients respectively. The mean PSA value at baseline was 300.2 (range 2.5–1577). In addition, disease stabilization was observed in 15%. Overall median survival was 14.1 months with 15 patients alive at the time of analysis. The side-effects were observed as expected with grade 3–4 neutropenia developing in 38% of the cycles and febrile neutropenia in 12% of the patients respectively. The medium number of cycles given was 4.8. No acute hypersensitivity reactions were seen. Transient renal insuffiency developed in two patients resulting in dose reductions.
Conclusions: The combination of docetaxel and ifosfamide seems active and well tolerated in patients with androgen-independent metastatic prostate cancer. Docetaxel based combination chemotherapy regimens need to be further developed to find more active and well tolerated treatment options for androgen-independent prostate cancer.

891 PUBLICATION

High dose rate afterloading brachytherapy and conventional external beam radiation therapy, preceeded or not of neoadjuvant total androgen deprivation, for elderly patient

A.C.A. Pellizzon, P.E.R.S. Novaes, M.A.C. Maia, R. Fogarolli, R. Ferrigno, J. Salvajoli. *Hospital do Cancer – ACCamargo, Radiation Oncology, Sao Paulo, Brazil*

Objectives: To evaluated the impact on biochemical control of disease (bNED), acute and late intestinal (GI) and urological (GU) morbidity for elderly patients presenting with initial and locally advanced prostate cancer who where treated with fractionated high dose rate brachytherapy (HDRB) as a boost to conventional external beam radiation therapy (EBRT).
Methods: From March 1997 through February 2002, a total of 55 patients, older than 70 years, with any of the following characteristics were eligible for study entry: biopsy proven adenocarcinoma Gleason Scored (GS), initial PSA level dosage (PSAi), 1992 AJCC clinical stage T3a or lesser, and prostate volume up to 60 cc. All patients had prior to HDRB a course of EBRT to a median dose of 45 Gy, given in 1.8 Gy fractions, to the prostate and seminal vesicles only. Patients were grouped into four groups, according to their risk for biochemical failure and neoadjuvant androgen deprivation (NAAD) or not, at description of the referral urologist. Low risk group (LR), encompassed patients who presented GS <6, T1 or T2a and or initial PSA <10 ng/ml. The remaining patients were grouped into high risk group (HR). HDRB doses prescription were 16 Gy and 20 Gy for each group, respectively.
Results: The median age of the patients was 74 years (range 70–83) and the median follow-up 33 months (range 24 to 60). There were 36.4% (20) patients in LR, 16.4% (9) in LR+NAAD, 32.7% (18) HR and 12.7% (7) HR+NAAD group. The 5-year crude and actuarial bNED rates were 76.3% and 76%, respectively. Four (7.3%) patients have died due other pathologies (mainly heart disease), but with bNED at time of death, so the actuarial overall survival rate at 5-year was 54%. Acute mild GU and GI morbidity rate were 18.2% and 7.3%, respectively. Late GI was not observed. Late mild GU morbidity was seen in 10.9% of the patients and severe late GU morbidity occurred in 7.3% of patients, represented by urethral strictures.
Conclusion: We conclude that elderly patients had similar bNED rates when compared to younger population, with acceptable morbidity rates, that did no impacted on quality of life. The watchful waiting police may be adopted for a selected group of patients in witch the life expectance is short due associated co-morbidity or for those patients with LR who refuse an initial treatment.

892 PUBLICATION

Bone turnover markers as prognostic factors of evaluation of clinical efficacy of zoledronic acid (CZOL446ERU03)

O. Karyakin[1], V. Matveev[2], B. Matveev[2], V. Shelepova[2], I. Rusakov[3], O. Loran[4], E. Veliev[4], L. Shaplygin[5], V. Birukov[1]. [1]*Russian Radiological Research Center, Oncourology, Obninsk, Russian Federation;* [2]*N. N. Blokhin Cancer research Center, Oncourology, Moscow, Russia;* [3]*P. A. Hertzen Cancer Research Institute, Oncourology, Moscow, Russia;* [4]*Russian Medical Academy of PE, Urology, Moscow, Russia;* [5]*Central military hospital, urology, Moscow, Russia*

Prognostical role of bone turnover markers in patients with bone metastases is not studied completely.
Methods: Levels of serum bone formation marker – osteocalcin and bone resorption marker – β cross-laps were measured at baseline, at month 3 and at month 6 in 30 Prostate Cancer (PC) patients with bone metastases treated with monthly 4 mg of zoledronic acid (Zometa). All patients had bone scintigraphy, measurement of bone mineral density (BMD) and PSA. All patients had orchectomy 1 month before start of Zometa treatment.
Results: At baseline 80% of patients had BMD loss (as an osteopenia). During Zometa treatment the levels of both serum markers decreased. β cross-laps were more specific for clinical efficacy. In 22/30 pts (73%) β cross-laps level was normalized at month 6. Clinically, at month 6 the patients had stabilization of disease in skeleton (by scintigraphy and PSA level). 4/30 (13.5%) pts at 6 month had progression of PC in skeleton (by scintigraphy and PSA level) and during all Zometa treatment period the level of β-cross-laps were two time higher than normal and doesn't had any dynamic. The third part of patients (4/30, 13.5%) at baseline had normal level of β cross-laps.
Conclusion: Level of bone resorption marker – β cross-laps in PC pts. (73%) with bone metastases was normalized already at month 3 and stabilized at month 6 of Zometa treatment. Usage of bone resorption marker β cross-laps could be consider as additional important test for monitoring of disease.

893 PUBLICATION

Organ preservation approaches with combined modality treatments for bladder carcinoma

A. Ito[1], H. Kiriu[1], K. Fujikawa[2], N. Hiromoto[3], Y. Kobukata[3], K. Wadasaki[4]. [1]*JA Hiroshima General Hospital, Radiation Oncology, Hatsukaichi, Japan;* [2]*JA Hiroshima General Hospital, Medical Imaging, Hatsukaichi, Japan;* [3]*JA Hiroshima General Hospital, Urology, Hatsukaichi, Japan;* [4]*Hiroshima University, Radiology, Hiroshima, Japan*

Background: Standard treatment of advanced bladder carcinoma is radical cystectomy. We tried to conserve bladder in this cancer patients with transurethral resection of bladder tumor (TUR-BT) followed by concurrent intraarterial chemotherapy and external beam radiation therapy. This study aims to evaluate the feasibility and efficacy of this combined modality treatments.
Materials and Methods: Between April 1990 and March 2005, 59 patients of bladder carcinoma were treated with combined modality treatments at JA Hiroshima General Hospital. There were 48 males and 11 females. Clinical T stages were T1: 6, T2: 18, T3: 31 and T4: 4 patients. All patients were N0, M0 and tumors were pathologically proven transitional cell carcinoma. We performed irradiation to bladder with concurrent intraarterial chemotherapy after TUR-BT. Clinical target volume of radiation therapy included all bladder volume in almost cases. 1.8–2.0 Gy was irradiated every 5 days a week and total dose was18 Gy-64.8 Gy (median; 50 Gy). At the same period, concurrent intraarterial chemotherapy was performed. Between April 1990 and June 1994, CDDP 50 mg/body and epirubicin 20 mg/body were infused 3 times (every other week). After 1994 July, CDDP 50 mg/body was infused 5 times (every week).
Results: 50 patients were evaluated by cystoscopy after treatment. The results of cystoscopy were that 28 cases were CR (complete response) and 17 cases were PR (partial response). Forty-six patients were alive, 12 patients were dead and one patient was lost of follow up. Only five of twelve patients ware died of bladder cancer. Bladder was conserved in forty-two of 46 alive patients. 5-year survival rate was 100% in T1, 86% in T2, 78% in T3, 0% in T4 patients. Acute complications (more than grade 3) were 2 cases of leukocytopenia, 2 cases of appetite loss and 1case of urinary pain. Late complications (more than grade 3) were 1 case of atrophy of bladder, 1 case of bladder necrosis and 1 case of ileus.
Conclusions: Transurethral resection of tumor followed by concurrent intraarterial chemotherapy and external beam radiation therapy for patients of bladder carcinoma is a safe and effective treatment, especially for organ preservation.