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EFFICACY OF ANTITUMOR DRUG UKRAIN IN TREATMENT OF BLADDER CANCER

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The randomized study included 36 patients with diagnosed T1-2NXM0 cancer of the urinary bladder (UB).

After the omprehensive examination 18 of 36 patients were treated with Ukrain (5 mg, 10 i.v. injections up to the overall dose of 50 mg). The repeated courses of treatment were carried out after 7-10 days. The results of the study were compared in randomized according to the tumor stage and localization groups of patients (18 subjects) who were treated conventionally.

After the 1st course of the Ukrain treatment all the patients noticed a considerable improvement of the general condition and appetite. In the presence of accompanying nonmalignant hyperplasia of the prostate, the patients showed a decrease in urination down to 1 or 2 times per night and a reduced amount of residual urine, 7 patients showed reduction of tumor size (more than 50%) and 9 patients demonstrated stabilization of tumor growth. After the 3rd course, the tumor was nearly completely resorbed in 2 patients and partially resorbed in 8 patients. Ukrain normalized the levels of T-suppressers and T-helpers, their ratio and blood plasma pool of free amino acids and derivatives.

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RENAL CELL CARCINOMA: ADJUVANT THERAPY WITH A PURE CELL-LYSATE AUTOLOGOUS TUMOR VACCINE (ATM)

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Purpose: No adjuvant therapy is available for renal cell carcinoma after radical tumor nephrectomy. Therefore we investigated the efficacy of a pure cell-lysate autologous tumor vaccine produced by macropharm GmbH (autologous-tumorvaccine-macropharm, aTm).
Methods: 169 patients with renal cell carcinoma have been treated with aTm after radical tumor nephrectomy. The progression free survival probability of these patients was compared to a historical control group of 107 patients from the same hospital, which received identical surgical treatment but without any adjuvant therapy.
Results: According to identical in- and exclusion criteria and two independent biometrical analyses there was no statistical difference between the main epidemiologic and clinical parameter of the two patient groups. As a consequence, any observed significant effects resulting from the treatment with aTm are based on assumptions to be most probably clinically relevant. Two years after nephrectomy, the first analyses presented evidence that there exists a difference of 22,8% in favor of the aTm group covered on stages pT2, 3a, 3b pN0/+ M0. During adjuvant treatment with aTm only two patients out of 169 showed minor side effects not exceeding WHO-grade I.
Conclusion: The results presented here are suitable to plan a prospective randomized controlled and multicenter phase III study, which runs now in 1997.

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DENDRITIC CELLS FOR AUTOLOGOUS TUMOR VACCINATION IN CHRONIC MYELOID LEUKEMIA

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In chronic myeloid leukemia (CML) the fusion region of the bcr-abl protein can be considered as truly tumor-specific antigen. Nonamer peptides from the fusion region bind to HLA-A3.2, A11 and B8 molecules and can elicit a cytotoxic T-cell response. In order to induce anti-bcr/abl immunity, we have generated dendritic cells (DC) from both peripheral blood mononuclear cells (pbmc) and circulating $CD34^+$ cells in CML patients. In CML, more than 90% of these DC have the unique feature of expressing the bcr-abl tumor antigen constitutively, as studied by fluorescence in situ hybridization (FISH). CD34+ cells were expanded in GM-CSF, IL-4, SCF and TNF-α for 12 days. Alternatively, T- and B-cell depleted pbmc from the same patients were cultivated for 7 days with GM-CSF and IL-4. According to morphology and immunophenotype up to 60% of the CD34-derived but only 20 to 40% of pbmc-derived cells were typical DC. The stimulatory ability of CD34-derived DC appeared to be superior in mixed lymphocyte reaction (MLR) experiments. Furthermore, we could demonstrate that the T-cell stimulatory ability of CD34-derived DC can be augmented by gene modification using the retroviral vector pLXSN-hIL-7 to introduce the gene coding for the T-cell active cytokine IL-7. IL-7 production of transduced DC was in the magnitude of 3000 pg/ 10^6 cells/ 24 h. In functional experiments, T-cell stimulation by IL-7 transduced DC was about 2- 3-fold higher when compared to mock-transfected or unmodified DC. Our studies suggest that DC derived from $CD34^+$ cells are suitable for vaccination therapy in CML.