

containing culture medium. In conclusion, rhKGF does not affect keratinocyte survival after irradiation, but stimulates proliferation of surviving cells.

16.

TOLERANCE OF RADIOTHERAPY (3D-CRT) AND ANDROGEN ABLATION FOR PATIENTS WITH PROSTATE CANCER

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Purpose: evaluation acute tolerance of combined treatment (XRT and HT). **Material/methods:** Between April 1999 and September 2000, 22 patients with prostate cancer (T1-T3NXM0) were treated with 3D-CRT and HT. Median age of patients was 68 years. EBRT was administered daily fraction of 1.8Gy, total dose 70.2Gy. Planning target volume (PTV) was defined as clinical target volume CTV (prostate and seminal vesicles) with 10mm margins around prostate except posterior margin where 5mm were used to decrease risk of rectum morbidity. Acute toxicities were evaluated using RTOG scoring scale. Median follow-up was 11 months. **Results:** Acute effects in gastrointestinal tract (GI) noted were; rectal discomfort and mild diarrhea. Acute genitourinary (GU) symptoms included urgency, nocturia and dysuria. GI toxicity was observed in 75 % of patients (grade 0 and 1), and 25% of patients (grade 2). GU toxicities were as follow: grade 0 and 1 –80% of patients) and grade 2 – (20% of patients). No grade 3 or 4 GI and GU toxicities were observed. **Conclusions:** Preliminary results of treatment with 3D-CRT suggested that such modality is well tolerated. HT did not exacerbate radiation toxicity.

17.

GENE THERAPY OF CANCER

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Number of gene therapy clinical trials and patients enrolled increases exponentially. Today there are more than 400 trials and over 4000 patients involved all over the world. However, most of the trails are in the early clinical phases.

About 67% of trials are related to cancer. Most of the cancer gene therapy strategies are based on various forms of gene-immunotherapy which include genetically modified tumor vaccines (GMTV), direct intratumoral administration of genes encoding immunostimulatory factors or insertion of these genes into tumor infiltrating lymphocytes (TIL). Other strategies include suicide gene therapy, direct intratumoral administration of genes encoding anti-oncogenes, gene anti-angiogenic therapy or bone marrow cells protection against high dose anti-cancer chemotherapy using MDR genes. Various gene carries are employed in above strategies. Retroviral vectors or Adenoassociated virus vectors are used for GMTV construction, TIL and bone marrow cells modifications. Adenoviral vectors and liposomes are employed for direct intratumoral gene administration. Other carriers such as lentiviral vectors (based on HIV) or SV40 based vectors are in the preclinical studies.

In January 1996 we have initiated melanoma gene-immunotherapy clinical trial using GMTV comprising of irradiated autologous melanoma cells admixed with cells of two allogeneic melanoma cell lines modified to secrete interleukin 6 (IL-6) and agonistic soluble IL-6 receptor (sIL-6R). Until now more than 180 patients were enrolled into study. Phase I trial demonstrated that GMTV is not toxic and possesses therapeutic potential. Phase II trial has shown that in melanoma stage IV with measurable metastatic disease GMTV significantly extended patients' survival. In 16 out of 45 patients (36%) response to the GMTV was observed (4 CR, 4 PR and 8 mixed responses including SD). More than 60% of responding patients survived 2 years while none of non-responders survived that period (rank-log test $p < 0.0001$). CD4+/CD8+ T cells ratio, antibody response, soft tissue metastases and performance status correlated with clinical response. Above results allowed the design of the phase III randomized double blind study which is about to be initiated.

18.

DO WE GAIN ANY BENEFIT FROM ACCELERATED IN RADIOTHERAPY FOR HEAD AND NECK TUMOR CANCER – WEEKEND'S MYSTERY?

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