1341

UPFRONT HORMONAL THERAPY, RADICAL PROSTATECTOMY, AND RADIATION THERAPY FOR LOCALLY INVASIVE PROSTATE CANCER

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A total of 53 consecutive patients with clinical stage C prostate cancer underwent hormonal therapy prior to definitive treatment. Thirty-six were then treated with radical prostatectomy, and the remainder underwent radiation therapy. Of 44 patients undergoing a staging pelvic lymph node dissection after hormonal therapy, 23% (10/44) were found to have D1 disease. Of those undergoing radical prostatectomy, 47% (17/36) had organ-confined disease, 39% (14/36) had pathological stage C disease, and 14% (5/36) had D1 disease. All patients with pathologically invasive cancer continued hormonal therapy postoperatively, and 11 of 14 patients with pathological stage C disease also received postoperative radiation therapy. Patients were followed from 11 to 72 months (median 36). Of those undergoing radical prostatectomy only 1 patient developed disease recurrence. This study demonstrates appreciable hormonal downsizing of the prostate gland with probable pathological stage reduction. An encouragingly high disease-free rate is reported. However, longer follow-up will be necessary to demonstrate a significant impact on long-term survival.

1342

SOMATOSTATIN ANALOGUE (SOMATULINE) VERSUS FLUTAMIDE IN PROSTATE CANCER.

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Growth of the R-3327-H rat prostate adenocarcinoma is inhibited by somatuline. We have used somatuline in patients with progressive metastatic prostate cancer and shown a response rate of 25% (NPCP criteria). This prompted us to investigate in a randomised study, somatuline versus flutamide in 31 patients relapsed following surgical or medical castration. 16 patients (mean age 74.4) were randomised to flutamide and 15 (mean age 73.1) to somatuline. Flutamide was given at a standard dose of 250mg tds and somatuline was given in a dose escalating fashion (over 3 months) from 1.5mg-12mg/24hrs by continuous sc infusion. Pre-treatment characteristics including histology, performance status and baseline PSA were similar and all patients had castrate levels of testosterone at entry into the study. Patients on flutamide were treated on average for 188 days (Range 5-791) before disease progression when the drug was stopped. Patients on somatuline were treated for an average of 196 days (Range 18-931). The somatuline treated patients lived for a mean duration of 51 weeks (3-133) and the flutamide treated patients lived for a mean duration of 37 weeks (Range 1-113) from entry into the study. The total survival from diagnosis was 151 weeks (Range 61-439) in the flutamide group and 194 weeks (85-580) in the somatuline group. Although the survival differences do not reach statistical significance this preliminary data indicates that there may be a survival advantage in the somatuline treated group and more patients are currently being recruited into this trial.

1343

D.W.W. Newling

PROGNOSTIC IMPORTANCE OF VARIOUS MARKERS OF PROGRESSION IN PATIENTS WITH METASTATIC PROSTATE CANCER? TREATED BY ZOLADEX AND FLUTAMIDE OR ORCHIECTOMY.
Further analysis of EORTC GU Group protocol 30853.
Analysis has been made of the prognostic importance of various forms of progression seen in patients treated with castration or total androgen blockade. In the majority of patients who progressed was an elevated PSA level. Those that so progressed enjoyed an average survival from the measured rise in PSA of a year. The levels of castration of other biochemical parameters such as alkaline phosphatase and acid phosphatase were associated with median survival times between 28 and 35 weeks. Patients who first progressed with changes in the bone scan, survived 36 weeks on average. Those who progressed with a falling haemoglobin had a very much shorter survival time of 22 weeks. Progression in existing soft tissue metastases carries an extremely grave prognosis, most patients dying within 3 months. Almost all the patients who progressed with a rising PSA later developed signs on bone scan or elevation of other biochemical markers indicating further progression. This prognostic information will be useful when more satisfactory second-line therapy for these patients relapsing after hormonal therapy, is available.

1344

COMPLEX HORMONO-CHEMO-RADIOTHERAPY OF LOCAL AND ADVANCED CANCER

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In the years 1981-90, hormonal treatment (orchiectomy + estrogen therapy) was performed in 70 previously untreated patients with local and advanced stage IV prostate cancer and 59 patients received combination therapy consisting of orchiectomy + estrogen therapy, polychemotherapy (cyclophosphan + 5-fluorouracil) and distant Gamma-therapy to the prostate (total dose of 60 Gy). Due to hormonal treatment, the general and the corrected 7-year survival rates were 4,7% and 8,4%, respectively, the recurrence-free survival median made up 12,7 ± 0,012 months. Combination hormono-chemo-radiotherapy resulted in the general and the corrected 7-year survival rates of 30,6% and 47,4%, respectively, the recurrence-free survival median made up 35,6 ± 0,002 months. Thus, combination therapy appears to be markedly superior regarding survival rate.

Testicular Tumours

1345

THE HUMAN FŒTAL H19 GENE IN GERM CELL TUMOURS OF THE TESTIS.

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The H19 gene, recently isolated from human fœtal liver, is highly expressed in most fœtal tissues and not expressed in almost all adult tissues. Although the function of H19 gene is not known, several data played in favour of its role in the development of the embryo and in tissue differentiation. In this study we have analysed by Northern blot hybridization the expression of this gene in 10 and 15 specimens of seminomatous (SEM) and non-seminomatous germ cell tumours of the testis (NSGCTT), respectively. H19 mRNA levels were found to be low or barely detectable in 9/10 SEM and elevated in 13/15 NSGCTT. Specimens of the teratocarcinoma sub-group in NSGCTT exhibit the highest degree of differentiation and express the most elevated H19 mRNA levels. In this small patient population we observe no correlation between H19 gene expression and either clinical stage, prognostic factors in advanced stage or human Chorionic Gonadotropin and alpha-fœtoprotein secretions. It is noteworthy that H19 gene is located on the short arm of chromosome 11 (11p15), a region in which deletions are frequently observed in human cancers. It is thus possible that this gene may be involved, in association with other genetic events, in the development of NSGCTT.

1346

RADIOTHERAPY IN STAGE I, IIA AND IIB SEMINOMA TESTIS

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The efficacy of radiotherapy in the early stages of testicular seminoma is currently being evaluated in a prospective multicenter study, which has been started in April 1991 in Germany. The novel approach of this study is to confine the treatment field to the paraaortic lymph nodes in stage I disease. In stage IIA and IIB, the treatment fields comprise the paraaortic and the ipsilateral iliacal lymph nodes. The applied dose in the target volume is 26 Gy in stage I, 30 Gy in stage IIA, and 36 Gy in stage IIB. 412 patients have been entered into the study. After a median observation time of 15 months, 5 patients (1.2%) suffered from a recurrence. The locations of the recurrences in stage I were: 1 in field, 1 in the left renal hilus and 2 in the ipsilateral inguinal nodes. In stage IIB one distant metastasis in the right lung has been observed. All patients are disease free after salvage therapy. The acute side effects of the treatment have been remarkable low in all stages. Mild nausea occured in 46 %, transient vomiting in 9% and vomiting requiring treatment only in 4 % of the patients. An increased bowel frequency has been observed in 13 % of the cases, transient diarrhoea (> 2 days) in 2 %, and diarrhoea requiring treatment in 2%. Our preliminary analysis is suggesting, that the tumour control rate is not impaired by applying reduced irradiation fields while the side effects are likely to be lowered.