Uro 17

INTERSTITIAL RADIOTHERAPY WITH 125-IODINE SEEDS IN THE TREATMENT OF PROSTATE CARCINOMAS

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From 1978 until 1985, 54 patients with prostate carcinoma stage T1 to T3 were treated with radioactive, permanent 125-iodine implants. Practical performance, dosimentric measurements and radiation protection measurements are described. Radiation induced side effects are dysuric complaints only. Potency is remained in over 90% of the patients. There are no rectal complaints as could be also shown by rectoscopy and rectal biopsies. Results of this treatment are shown by the table below:

Prostatic cancer treated with interstitial 125-iodine-implants

total number	N = 54
median follow up	3 1/2 years
Alive	n = 46 (85%)
without progression	n = 41 (76%)
metastasized	n = 3 (5.5%)
local failure	n = 2 (3.7%)
Dead	n = 8 (15%)
metastasized	n = 4 (7.4%)
intercurrent	n = 4 (7.4%)

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Uro 18

PROGNOSTIC RELEVANCE OF TUMOR MARKERS IN TESTIS GERM CELL TUMORS

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Since modern chemotherapy for patients with germ cell tumors of the testis has resulted in a rising cure rate, orchidectomy alone is gaining some popularity in the management of clinical stage-I non-seminomatous germ cell tumors (NSGCT).In that situation,factors which have prognostic significance have to be clearly defined.In the present study we therefore focused on pathological,immunohistological and clinical parameters to discover those which indicate an unfavorable course of the disease. Tissues of 15o patients,94 of whom had NSGCT were studied with the immunoperoxidase technique for the presence of AFP,CEA,HCG,and SP-1.The histopathology was classified according to the WHO (1977).
A HCG positivity was found in 9% of seminoma patients,and preoperatively elevated serum detected in 9%.However,only 3/5 patients had a tissue and serum positivity.In the tissues of 94 NSGCT the following positivity rates were obtained: AFP 64% (60/94),CEA 41% (39/94),HCG 53% (50/94) and SP-1 30% (23/76).32 cases,mostly embryonal carcinomas were negative for all the markers.Preoperative AFP serum values were elevated in 51% (43/85) and HCG serum values in 40% (34/86).40% of all patients had normal AFP or HCG values.Survival was not affected by the tissue presence of any of the markers.Choriocarcinoma in pure or mixed form (9 cases) was the only histologic component of prognostic importance.The diagnosis of this subgroup was facilitated by the HCG tissue staining.Similarely,AFP aids in a more precise histological diagnosis of testis tumors. Nevertheless,clinical and pathological stage of testis tumor patients are of greater importance than histological typing of NSGCT and tumor markers.

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Uro 19

HLA ANTIGENS IN PATIENTS WITH TESTICULAR CANCER

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An association between testicular tumor and HLA antigen frequency could indicate a genetic background for the development of testicular neoplasia. Until now we have examined 98 pts. for 14 HLA-A, 30 HLA-B, 8 HLA-C, and 10 HLA-DR antigens.

Compared with 450 healthy unrelated individuals we found a marked but not statistically significant increase in HLA-A 31 in 68 pts. with unilateral tumor. In 17 pts. with bilateral testicular tumors the most but not significant increase was seen in HLA-B 32. In 13 pts. with familial testicular germ cell neoplasia we found a marked but not significant increase in HLA-B 35. The observed genotypes of 5 pairs of affected brothers were identical in 2, semi-identical in 1 and different in 2 families (expected Mendelian frequencies 25%, 50% and 25%). Age at tumor diagnosis, stage of disease and cell type were not related to HLA antigens.

Earlier reports have described a significant increase in different HLA antigens in pts. with testicular germ cell tumors. We cannot confirm this. In 98 pts. with testicular cancer we found no statistically significant difference in HLA antigen frequency when compared with healthy individuals.

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Uro 20

21 PATIENTS WITH BILATERAL GERM-CELL TUMORS OF THE TESTES

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21/800 pts. with testicular cancer seen from 1965 to 1985 at the Hannover Medical School developed a bilateral tumor. Three of these 21 pts. had simultaneously detected tumors with seminoma of one and a nonseminomatous germ-cell tumor (NSGCT) of the other testis. The other 18 pts. successively developed bilateral tumors: bilateral seminoma (5), seminoma followed by contralateral NSGCT (5), bilateral NSGCT (2), NSGCT followed by contralateral seminoma (6). From 10 pts. with stage T1N0M0 of their first malignancy, 3/10 developed a sequential contralateral tumor of identical and 7/10 a tumor of different cell type.
The cell types of both tumors in one individual are not more often identical than might be expected by chance. It is not at all clear which factors are responsible for the growth of one or the other cell type. In our series of 18 pts. with successively developed bilateral testicular tumors it seems that age at the time of tumor diagnosis is the most predictive parameter for the development of a seminomatous or a nonseminomatous tumor. Patients with seminoma first and NSGCT second are younger at the time of first tumor diagnosis than pts. with seminoma who later develop a contralateral seminoma too. This observation suggests that age dependent hormonal factors influence the differentation of a hypothetical pluripotent stem cell to a seminomatous or a nonseminomatous germ cell tumor.

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