

endometrial carcinoma. 11 out of 34 pts. with cervical cancer and 4 out of 7 pts. with endometrial cancer died on disease. 4 pts. (2 cervix carcinoma and 2 endometrial carcinoma) died on intercurrent disease. 9 pts (4 × stage II, 3 × stage III and 2 × stage IV disease) with cervical and 2 pts. with endometrial carcinoma (1 × IIB, 1 × IIIB) died of recurrent disease or progress. In the majority of treatments, rectum and bladder doses measured by in vivo-dosimetry were less than 65% of reference isodose.

As the only major side effect one patient with cervix carcinoma stage IIIB developed a recto-vaginal fistula (EORTC, RTOG-score grade 4). No severe late proctitis and cystitis have been observed.

We conclude that the individual blocking of the brachytherapy treatment region in the combined external beam and HDR-brachytherapy for inoperable cervical and endometrial cancer allows an aggressive and tumoradapted individual therapy without an increase of severe side effects.

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POSTER

Treatment of advanced stages of cervical cancer: Interferon alpha-2α plus isotretinoin versus radiotherapy

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Methods: Sixty two (62) women of mean age 59.6 ± 11.26 with cervical cancer (stages IIB-IVA) were evaluated (17.33% dropped out) after treatment (Group A, n = 46) with Interferon alpha-2α (Roferon-A, Roche) plus Isotretinoin (Roaccutane, Roche) (9 MIU sc 3 times weekly + 60 mg daily for 3 months, respectively) or (Group B, n = 16) radiotherapy (external irradiation 18 MV photon beam 54 Gy + 20 Gy brachytherapy).

Results: Complete response (CR) was observed in 18 (39.13%) patients and partial response (PR) in 10 (21.73%) patients of Group A; also in 10 (62.5%) CR and in 5 (31.25%) PR of Group B was observed but this difference was not statistically significant. It was not observed any difference neither concerning the disease free survival (20.27 ± 6.9 vs 18.90 ± 8.49 months, $t = 0.94$, $p = 0.266$) nor the down staging rate (60.86% vs 62.5%, $p = 0.50890$). Twenty eight (60.86%) patients of Group A were submitted to Werthaim operation and histological remission rate was 26.08%. It was not observed any difference between the two groups concerning the recurrence rate (11.11% vs 30%, $p = 0.72561$) nor the 2 years survival rate (95.65% vs 100%, $p = 0.35840$). All women were followed-up for a mean 40.5 ± 9.24 months (range 24–57 months). It was not observed any difference in response rate according the Stage of the Disease in Group A ($\chi^2 = 6.79$, $p = 0.29340$) but there were observed statistically significant more CR in Stage IIB in Group B ($\chi^2 = 10.66$, $p = 0.03058$).

Conclusions: The treatment of choice for stages IIB-IVA of cervical cancer should be the radiotherapy while for the stages IIIB-IVA could be also considered the combination of Interferon-alpha-2α plus Isotretinoin. It is interesting to note that the combination of Interferon-alpha-2α plus Isotretinoin could be considered as an alternative treatment at least in younger patients but under close (monthly) surveillance.

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POSTER

Pretreatment with retinoic acid plus interferon improves tumor tissue oxygenation in cervical cancers

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Purpose: We have evaluated the tumor tissue pO_2 in cervical cancers in patients treated with radiotherapy plus 13-cis-retinoic acid/interferon-α-2α.

Materials and Methods: From June 1995 through April 1996, fourteen irradiated patients with cervical cancers FIGO IIB/III received additional treatment with 13-cis-retinoic acid (cRA) plus interferon-α-2α (IFN-α-2α) starting 14 days prior to radiotherapy (1 mg per kilogram body weight cRA orally daily plus 6×10^6 I.U. IFN-α-2α subcutaneously daily). After this induction period, standard radiotherapy was administered (external irradiation with 45Gy in 25 fractions of 1.8Gy plus HDR-brachytherapy with 5×7 Gy). During radiotherapy, cRA/IFN-α-2α-treatment was continued with 50% of the daily doses. Tumor tissue pO_2 -measurements were performed prior to radiotherapy, at 20Gy, and at the end of radiotherapy with an Eppendorf- pO_2 -histograph.

Results: The 14 patients with cRA/IFN-α-2α-pretreatment prior to radiotherapy had significant higher median pO_2 -values in their tumors at

the beginning of irradiation than 14 comparable patients without cytokine-retinoid-pretreatment (median pO_2 , 26.2 vs. 16.5 mmHg, $p < 0.01$). The higher pO_2 was maintained during the course of radiotherapy. Eight patients had pO_2 -measurements prior to the cRA/IFN-α-2α-treatment and after the 2-week induction period. In six of them, the pO_2 -values increased during the 2-week induction period.

Conclusions: Treatment with cRA/IFN-α-2α improves oxygenation of cervical cancers and requires further investigation.

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POSTER

Cell cycling related nuclear antigen expression and detection of hyperplasia in routine endometrial biopsy

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Purpose: Endometrial biopsy architecture features extensive architectural changes related to the ovulatory cycle. Complex and simple hyperplasia are usually focal lesions. Recently monoclonal antibodies directed against nuclear antigens expressed in S-phase of cell cycle have become available for use in routine paraffin embedded tissue. We aimed to assess whether detection of hyperplastic lesions was facilitated by detection of proliferation activity.

Method: 143 consecutive unselected, routinely fixed and processed endometrial curettage biopsies from pre-menopausal women with metrorrhagia were studied. 5 micron paraffin sections were subjected to routine immunocytochemistry with commercially available monoclonal antibodies against PCNA (PC10, DAKO, USA) and cDNA defined segment of the Ki-67 antigen (MM1, NovaCastro, UK). In cases with hyperplasia, proliferative activity of hyperplastic glands was compared with that of adjacent normally cycling endometrium and classified for activity of cycling as absent, equal, increased or reduced, by two independent observers.

Results: Of 28 samples insufficient material was received for dependable assay. Of the remaining 115 samples, hyperplasia was detected in 13 samples (complex 7, simple 6). In the lesions, absence of proliferative activity was noted in 4 cases. In 2 of these proliferative activity in both normal and hyperplastic glands was undetectable. In all other (7/9) glands (segments), proliferation was lower than that of adjacent normally proliferating glands.

Conclusions: Hyperplastic lesions in endometrium biopsies of women with metrorrhagia may have consistently lower proliferation rates in comparison to adjacent cycling gland lining. The relationship of this proliferative rate limitation to neoplastic transformation warrants further study.

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POSTER

148 cases of vulvar cancer – Results of radical surgical treatment

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Purpose: The aim of the present prospective study was to evaluate the value of radical surgery in vulvar carcinoma on the background of morphologic prognostic parameters (LN-involvement, depth of infiltration, tumor size and localization).

Methods: 148 patients with primary squamous cell carcinoma of the vulva were treated at the CRI St. Petersburg. 28 patients had FIGO I lesion, 58 FIGO II, and 62 patients had FIGO III tumor. Radical vulvectomy with inguinal lymphonodectomy was performed in 115 cases, a simple vulvectomy in 33 cases (Nx). 53 patients were nodalpositive, 62 were nodal negative. In 41 cases the depth of infiltration was 1–5 mm, in 83 cases 6–10 mm, and in 24 cases it was greater than 11 mm.

Results: The stage dependent 5-year-survival rate was 96.4% (FIGO I), 87.7% (FIGO II), 62% (FIGO III), and 79.2% (overall). The 5-year-survival rate of lesions of the labium minus was 94.6%, of the labium majus was 83.1%, of the clitoris – 82.2%. In nodalpositive cases the prognosis was significantly better than in nodalnegative patients (61.6% vs. 86%). The prognosis of patients with a solitary LN metastasis was significantly better than in patients with two or more LN metastasis (79.6% vs. 51.6%).

Conclusions: Tumor localization, tumor size, lymphnode status and especially the depth of invasion are the important prognostic factors in vulvar cancer.