

caused by endometrial cancer. Nowadays, scoring systems have become acceptable in medicine as less invasive, adequate, and precise diagnostic method. The main goal of this study was to examine statistical significance of clinical-sonography scoring system as a noninvasive diagnostic method for endometrial cancer.

Material and methods: It was a prospective study and 122 patients with postmenopausal bleeding were included. Transvaginal sonography was performed before curettage. Patients were divided into the two groups (A and B), after final histopathological findings obtained by curettage. Group A consisted of patients with endometrial cancers and group B of patients without endometrial malignancy. Clinical-sonography scoring system named ONKO 1 have been created. Each patient got her own score by using the parameters for scoring systems obtained by anamnesis, clinical exam, and transvaginal ultrasonography. Evaluations of these clinical-sonography scoring systems were performed by using test for diagnostic accuracy and receiver operating characteristic (ROC) curve.

Results: Patients with endometrial cancer were older: 64.49 vs. 58.81 years, length of corpus uterus was longer: 6.41 vs. 5.25 cm, and postmenopausal period was longer: 13.67 vs. 9.11 years. All parameters were statistically significant. Average value of clinical-sonography scoring system ONKO 1 in group A was 9.14, SD \pm 2.32 and in group B was 7.13, SD \pm 3.07. There was found statistically significant difference between group A and group B of patients using this scoring system.

Conclusion: Postmenopausal bleeding caused by endometrial cancer is usually diagnosed in older patients. It was possible to distinguish high risk patients with neoplasia from those with benign changes of endometrium using the clinical-sonography systems ONKO 1. There was statistically significant difference between scoring values of these groups of patients. "Cut-off" value was "6 for ONKO 1 scoring system. Nevertheless, histopathological examination is still unavoidable in final diagnosis of endometrial cancer.

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PUBLICATION

Efficacy and safety of combined radiotherapy with irinotecan (CPT-11), interferon (IFN- α -2b) and amifostine in patients with locally advanced cervical carcinoma

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Introduction: In patients with Locally Advanced Cervical Carcinoma, there has been an increasing interest in combining conventional radiotherapy (RT) with chemo-sensitizing agents such as irinotecan (CPT-11) and interferon α 2b (IFN- α -2b). Toxicity is always increased with chemo-radiation, which might affect the treatment gain. Amifostine significantly reduces acute and late chemoradiation induced toxicities. The purpose of this study was to evaluate the efficacy and safety of the combined treatment.

Material and methods: 47 patients with Locally Advanced Cervical Carcinoma St IIb(33), St IIIa(3) and St IIIb (11) entered this study. The median age was 57 years (range 36–78). The patients received standard fractionated RT (1.8 Gy/fraction, 5 days/week) for six consecutive weeks (median dose 54.0 Gy), CPT-11 (30 mg/m² iv on day 1 of each RT week) and IFN- α -2b (3MU/3 TIW sc) during the whole radiation treatment. Additional intracavity treatment with CS137 (20 Gy) was given. Amifostine was administered at a flat dose of 500 mg iv prior to each RT fraction. Patients were evaluated for response six weeks after the completion of at least 4 cycles of biochemo-radiotherapy.

Results: Until now 36 of 47 patients were evaluated for clinical response. 11 patients were non-valuable due to: Refusal to the treatment plan (4 pts), increased toxicity (5 pts), non-completion of the treatment schedule to date (1 pt) and death due to inter-current disease (1 pt). All patients received amifostine as scheduled except 2 pts to whom the administration was interrupted due to hypotension (1 pt) and emesis (1 pt).

Complete response was present in 23 patients (64.0%), partial response in 7 patients (19.4%) and in 6 patients (16.6%) progressive disease was present. Of the 23 patients that have shown clinical complete response, 10 patients underwent hysterolingo-oophorectomy (8 pts StIIb, 2 pts St IIIb). 8 patients of them have shown pathological complete response, while 2 patients have shown pathological partial response. Median overall survival was 22 + months.

46 patients were valuable for toxicity grade 3–4. Hematological toxicity (6/46 pts, 13.04%) and intestinal mucositis (6/46 pts 13.04%).

Conclusion: The combination of standard fractionated RT with concurrent administration of CPT-11 and IFN- α 2b in patients with Locally Advanced Cervical Carcinoma is highly active and well tolerated treatment. The use of

amifostine before RT is well tolerated and is clinically beneficial concerning the chemo-radiation toxicities.

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PUBLICATION

Radiotherapy in the adjuvant setting of cervical carcinoma: Treatment results and prognostic factors

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Background: To evaluate the efficacy of postoperative radiotherapy and to investigate prognostic factors for early stage cervical cancer patients.

Methods: From December 1993 to December 2001, 157 patients with stage I-II cervical cancer treated by surgery and postoperative radiotherapy were included in this study. Indications for postoperative external radiotherapy were based on pathological findings, including lymph node metastasis, positive surgical margins, parametrial involvement, pT2 tumor and presence of any 2 minor risk factors like lymph vascular space involvement, deep stoma invasion and tumor diameter between 2–4 cm. Seventy-two (46%) patients received radiotherapy (RT) alone, whereas 68 (43%) were treated with RT and concomitant chemotherapy (CT) and 17 received neoadjuvant CT. Patients with positive vaginal margins also received 27.5 Gy HDR brachytherapy in 5 fractions.

Results: Median follow-up time was 43 months. The actuarial 5-year overall (OS) disease free (DFS), local recurrence free (LRFs) and distant metastases free (DMFS) survival rates were 72%, 68%, 76% and 87% respectively. Univariate and multivariate analyses revealed that metastatic lymph node (LN) level was the unique significant prognostic factor for all end points and concomitant CT was another significant factor for all end points except DMFS. Number of metastatic pelvic LN for LRFs, RT duration for DFS and LRFs and tumor diameter and type of surgery for DMFS were the other significant prognostic factors that affect survival rates in multivariate analyses. Based on the tumor related prognostic factors, we defined 2 groups as Intermediate risk group (no LN metastasis or with positive 1–3 obturator LN metastases) or high risk group (with positive common iliac LN metastases or more than 3 positive LN metastases). Significant differences were found between these risk groups in terms of OS, DFS and LRFs. Concomitant chemotherapy produced significantly better survival rates in intermediate risk group, whereas no significant benefit could be found in high risk group.

Conclusion: Our results indicate that level and number of metastatic LN's are the most important prognostic factors determining the survival rates and patients with upper lymphatic involvement or more than 3 metastatic LN, it seems concomitant CT is not adequate for patients with upper lymph node involvement or more than 3 metastatic LN.

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PUBLICATION

Cell proliferative activity in endometrial cancer: 5-year follow-up

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Purpose: The purpose of the study was to research flow cytometry characteristics in endometrial cancer.

Methods: Flow cytometry characteristics (EPICS-XL, Coulter, USA): tumor cell ploidy, cells quantity in G0/G1, S and G2+M, iDNA, aneuploid cells quantity, and proliferative index (IP) were studied in 102 patients with endometrial cancer I-IV stages (FIGO) (mean age 59.7). Median follow-up was 62 months.

Results: Stage I endometrial cancer was diagnosed in 82 (80.4%) patients, stage II – in 8 (7.8%), stage III – in 11 (10.8%), and stage IV – in 1 (1.0%). Sixty-eight patients (66.7%) had endometrioid adenocarcinoma, 23 (22.5%) – adenocarcinoma with squamous differentiation. Sixty-seven patients (64.7%) had aneuploid tumors. Most patients with aneuploid tumors had iDNA = 1.1 – 1.76. Mean G0/G1 content was 81.7 \pm 0.8%, S – 9.6 \pm 0.5%, G2+M – 8.7 \pm 0.7%, IP 18.3 \pm 0.8%. Aneuploid endometrial cancer was diagnosed significantly more often in patients older than 70 years, in advanced cases, grade 2–3 tumors, tumors with deep (>1/2) myometrial invasion, cervical and intraperitoneal involvement, adnexal and lymph node metastases, and lymph-vascular space invasion (p < 0.05). There was positive correlation between mean G0/G1, S, G2+M content