common are anastomoses between large chorionic plate vessels but small arteriovenous anastomoses are much more important (9).

At the chorionic surface arteries cross over veins and are normally paired, penetrating the chorionic plate together. Large superficial anastomoses are identified after stripping the amnion from the chorionic surface, by pushing the blood or by injecting milk, air or tissue dye into the arterial branch supplying a suspected anastomosis and documenting its return to the venous district of the other twin. The injection is done after both cords have been removed and the rest of them clamped. Arteriovenous anastomoses are more difficult to identify, because they occur between capillaries deep within the villous parenchyma. Potential sites of arteriovenous anastomoses can be suspected when an unpaired artery from one twin penetrates the chorionic plate in close proximity to an unpaired vein from the other twin. The size, diameter, location and type of anastomoses have to be recorded. The most serious complications of vascular anastomoses are twin-twin transfusion syndrome (TTTS) and TRAP (Twin Reversed Arterial Perfusion).

Monoamnionic monochorionic placentas are the rarest, but are associated with the highest mortality. The umbilical cords in MoMo placentas are typically inserted very closely, so the twins are at an increased risk for cord entanglements (most common prior to 24 weeks gestation, while there is still sufficient room for fetal movement) (9).

3. The presence of gross or histologic abnormalities is documented in the same manner as in the placentas from singleton pregnancies.

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Prognostic factors influencing recurrence rate in early stage cervical cancer: The implementation of prognostic index and risk grouping in surgically treated patients

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Objective: The clinical behavior of carcinoma of the uterine cervix varies and covers a wide spectrum, from cases that are relatively indolent to those having a rapidly progressive course. For cervical carcinoma, clinical FIGO staging has been the most important single parameter influencing choice treatment and indicating outcome [1,2]. Many recent studies have suggested that this staging system is not capable of discriminating with regard to patient's survival within and between stages [3].

Several years ago, in a prospective and retrospective study made by our Department, tumor invasion into blood vessels, pelvic lymph node involvement, tumor diameter, the degree of inflammatory cell infiltrate at the invasive front, and minimum thickness of uninvolved cervical stroma/parametrial extension were identified as independent and significant prognostic factors for disease-free survival (DFS) among variables investigated by multivariate analysis [4]. In addition, the prognostic index (PI), defined by the model, was able to categorize the patients into three distinct risk groups. Differences in DFS rates between the low-, intermediate-, and high-risk groups were statistically significant. Based on the data reported by two other recent randomized trials radiochemotherapy was recommended for the patients belonging to the high-risk group, while radiation alone was suggested for the intermediate-risk group patients [5,6].

The objective of this prospective study was to validate the prognostic criteria defined by the results of our previous study in an independent population of surgically treated cervical carcinoma patients.

Method: The study group consisted of 340 patients with early stage cervical carcinoma who underwent abdominal hysterectomy with pelvic lymphadenectomy as primary therapy between 2000 and 2005. All patients were staged according to postoperative pTNM classification guidelines [2]. In addition to tumor and pelvic lymph node status, further prognostic parameters included in the study were maximum diameter, depth of stromal invasion and thickness of uninvolved cervical stroma/parametrial extension, vaginal involvement, surgical margin involvement, histological type, grade of differentiation, blood vessel invasion and inflammatory infiltrate in the tumor's invasive front. Based on the scores of the variables and calculated PI values, the patients were divided into three prognostic groups [4].

For univariate analysis the percentage of DFS for each group was calculated using the Kaplan-Meier method and comparisons between groups were performed applying log-rank test. Chi-square and/or Fisher's exact test were used to compare differences in recurrence rate, while log-rank test was used to test differences in DFS between prognostic groups. Statistical analysis was performed using the SPSS statistical package.

Results: During the follow-up period (range, 16-89.7, mean, 39.7+22.2 months) recurrences were observed in 43 (12.6%) patients. The actuarial DFS rate for 340 cervical cancer patients at 5 years was 84.47%. Lymph node metastases, tumor status, large tumor diameter, deeper stromal invasion, smaller thickness of uninvolved cervical stroma/parametrial extension, vaginal involvement, poorer grade, blood vessel invasion, and more scarce inflammatory reaction in the tumor's invasive front were highly significant predictors for a shorter duration of DFS in the univariate analysis ($P<0.05$).

According to the value of the PI, the patients were categorized into three distinct risk groups: 97 (28.5%) belonged to the low-risk, 131 (38.5%) to the intermediate-risk and 112 (32.9%) to the high-risk group. Recurrences were observed in 1% (1/97), 12.2% (16/131) and 23.2% (26/112) of the low-, intermediate-, or high-risk group patients, respectively. The 5-year DFS rates of the low, intermediate, and high-risk groups were 98.82%, 84.57% and 74.01%, respectively. Differences in DFS rates between the low, intermediate, and high-risk groups were statistically significant ($P<0.00001$).

In order to validate the model from our previous study, we have compared the recurrence rates and DFS rates between the prognostic groups. There was no difference in DFS rate between low-risk groups, in spite of the fact that majority of the patients in this study were not irradiated, while radiotherapy was administrated invariably to all the patients included in the original study. Similarly, DFS did not differ significantly between the intermediate-risk groups from both studies, which could be expected since radiotherapy was administrated to majority of the patients (125/131) in this study. In contrast, the high-risk group patients in this study had significantly higher DFS rate (74.01% vs. 44.24%, $P=0.0010$), probably as the result of the adjuvant chemotherapy administrated to 69% of them.

Conclusion: The current study confirmed previous data on prognostic factors in early stage cervical carcinoma, insofar as univariate analysis demonstrated that regional lymph node status, maximum diameter, depth of stromal invasion and thickness of uninvolved cervical stroma/parametrial extension, vaginal involvement, grade of differentiation, blood vessel invasion and inflammatory infiltrate in the tumor's invasive front were of important prognostic significance in surgically treated early stage cervical cancer patients. In addition, based on the results of this prospective study, the individual value of the PI should be considered when an eventual postoperative therapy is planned and prognosis is determined in early stage cervical carcinoma patients. Its application clearly facilitates the recognition of those surgically treated patients with early stage cervical carcinomas that require a modified treatment approach.

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