

7.2. Abstract

The aim of the study was to evaluate whether the serum levels of HE4 and CA125 correlate to clinicopathological prognostic factors of high-grade endometrial cancer at the time of the primary diagnosis as well as finding the recurrence of the neoplastic process in relation to the depth of myometrial invasion, the disease stage according to the FIGO staging system, the presence of lymph node metastases and the comparison of their concentration levels found in the primary cancer diagnosis and at the time of recurrence detection. The study included 91 patients with high-grade endometrial cancer (32 cases of G3 endometrioid carcinoma, 20 clear cell carcinomas and 39 serous carcinomas). Measurement of HE4 and CA125 levels was performed with reagent packs manufactured by Roche Diagnostics (Switzerland) with Cobas e411 immunochemical analyser (Roche Diagnostics, Switzerland) using the electrochemiluminescence (ECL) technique.

Statistically significant differences were observed in CA125 and HE4 levels in primary diagnosis of endometrial cancer, depending on the depth of myometrial invasion, the disease stage and the presence of lymph node metastases. In the group of patients who experienced a recurrence, a statistically significantly higher median concentration of HE4 was found in the primary diagnosis of endometrial cancer. The median concentration of CA125 and HE4 was statistically significantly higher at the time of recurrence, compared to patients who did not relapse. The analysis of preoperative levels of CA125 and HE4 may be helpful in the assessment of high-grade endometrial cancer risk factors such as the depth of myometrial invasion, the disease stage and the presence of lymph node metastases. The results of the analysis of preoperative serum levels of HE4 may indicate the possibility of relapse.

