

8.2. Streszczenie w języku angielskim

The aim of the study was to assess the diagnostic and prognostic value of YKL-40 as a biomarker for EC. The diagnostic value was assessed in a group of 67 EC patients and 55 healthy women. Preoperative serum YKL-40 concentrations were analyzed for histological grades and clinical stages, depth of myometrial invasion, presence of lymph node metastases, disease free survival (DFS) and overall survival (OS). The immunoenzymatic ELISA method was used to determine protein concentrations. The median YKL-40 concentration in the control group was 23,4 ng/ml, while in the study group it was 71,3 ng/ml. These differences were statistically significant ($p=0,011$). There were no statistically significant correlations between YKL-40 concentration and the analyzed clinicopathological parameters. The potential diagnostic usefulness of YKL-40 concentrations was assessed by ROC curve analysis. At the cut-off point of 42.8 ng/ml, the diagnostic sensitivity and specificity were 77,55% and 80,85%, respectively. Univariate log-rank analysis showed an association between clinical stage, histologic grade, depth of myometrial invasion, YKL-40 and DFS. DFS was associated with YKL-40 levels as shown by one-way log-rank analysis. In patients with cancer recurrence, the proportion of cases with increased YKL-40 levels was significantly higher (64%) than in patients without recurrence (41%) ($p=0,006$; $\chi^2=7,416$). The multivariate analysis did not identify independent prognostic factors. YKL-40 concentration had a significant effect on OS ($\chi^2=6,178$). Its elevated concentration was observed in 74% of patients who died, compared to 46% of the living ($p=0,043$). In log-rank analysis, FIGO stage ($p=0,004$), histology grade ($p=0,021$), depth of myometrial invasion ($p=0,006$), lymph node metastasis ($p=0,007$) and YKL-40 levels ($p=0,043$) showed significant prognostic value. The multivariate analysis did not identify any independent prognostic factors. The obtained results are the basis for the following conclusions:

1. YKL-40 may be a useful EC diagnostic marker.
2. Preoperative serum concentrations of YKL-40 do not correlate with the examined clinicopathological factors.
3. Elevated levels of YKL-40 in patients with EC may have prognostic implications for cancer recurrence and survival time.