Serum levels of ADAM 12 and ADAM 17 in patient with colorectal cancer depending on the staging and grading

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ADAM proteins belong to the family of matrix metalloproteinase. In humans identified ca. 20 members of this group. The main role of these proteins are involved in the processes of migration, adhesion and cell proliferation, hence their importance in the process of carcinogenesis. In the present study, we examined the relationship between serum levels of ADAM 12 ADAM 17 in patients with colorectal cancer depending on the staging and grading. The study included 70 patients (41 men, 39 women), age: 32-88 years (mean age 69.01). Protein concentrations in serum were determined by ELISA and the results are compiled in the Statistica 12. ADAM 12 protein concentrations ranged 0, 6-26, 72 ng/ml (mean: 5.00 ng/ml). Protein concentrations of ADAM 17: 0, 44-9, 83 ng/ml (mean: 2.09 ng / ml). In the study group, 31 patients were classified as early stage of the disease (TNM I-IIC). In the study group dominated second degree of histological malignancy (G2 - 48 patients) and the most common type of cancer was Adeno carcinoma. Based on the analysis, there was no significant relationship between the degree of clinical stage and histological grade of colorectal cancer and serum concentrations of ADAM 12 and 17. Moreover positive relationship between serum concentration of ADAM 12 and ADAM 17 was found. In our view, research on the role of ADAM proteins in colorectal cancer need to be continued, and presented results can be a starting point for further projects.

Biography
Paweł Kozieł has graduated from Silesian Medical University in 2011 and he works in Department of Internal Medicine in Bytom as Junior Assistant. Currently, he is also a PhD student in the Medical Doctor program at Silesian Medical University in Katowice. His works were recently published in 4 international journals and 2 local journals, in the areas of gastroenterology, oncology and endoscopic techniques in particular.

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