

Секция «Фундаментальная медицина»

Diabetic nephropathy - the most common cause of chronic kidney disease and common comorbidities

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Introduction: Diabetic nephropathy (DN) is one of the most serious complications of the diabetes mellitus (DM). DN occurs within 20-40% of diabetic patients and it is the most common cause of chronic kidney disease (CKD) in the United States and most European countries. Diabetes, hypertension and anemia are more common in CKD patients than in individuals who do not have CKD.

The aim was to determine the incidence of diabetic nephropathy in patients who were treated at the Clinic for Internal Diseases of the University Clinical Centre in Banja Luka and to compare common comorbidities in CKD patients with and without DN.

Material and Methods: The retrospective study included 156 patients with diagnosed CKD. Age of the patients was between 22 and 87 years, 60 years average. We collected data of blood and urine biochemistry tests and data related to comorbidity and risk factors. Descriptive statistics and chi-square test were used as statistical analysis methods.

Results: DN was diagnosed in 63.89% of the patients with CKD, with a highly significant difference ($p < 0.018$) compared to the other causes of CKD. DN was proved in 80.43% of the patients with type 2 DM and in 19.57% of the patients with type 1 DM. Smoking was showed as non-significant risk factor ($p > 0.05$). Hypertension was present with a significant difference ($p < 0.05$) in 73.91% of CKD patients with DN, compared to the presence in CKD patients without DN, where hypertension was present in 47,62%.

Conclusion: Diabetic nephropathy which is complication of especially type 2 diabetes, is the most common cause of CKD. Hypertension develops more frequently in the CKD patients with DN, which is consistent with the results of similar studies.

Key words: Diabetic nephropathy, chronic kidney disease, common comorbidities

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