

37. ARTERIAL HYPERTENSION AT THE PATIENTS WITH DIABETES

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Introduction. Arterial hypertension within diabetes is an interdisciplinary subject of interest for cardiology and endocrinology. This topic is of major importance, taking into account the number of diabetic patients in association with hypertension is progressively increasing, and this worsens the microvascular and macrovascular complications outcomes, and increases the mortality rates.

Aim of the study. Study of the frequency of high blood pressure of people with type 2 diabetes, the risk factors for developing it, and the impact of hypertension on diabetes complications.

Materials and methods. The study sample included 120 patients with type 2 diabetes treated in the Endocrinology section of the Republican Clinical Hospital during 2017. We assessed tension values, body mass index, and the stress level in all patients using a questionnaire. The examination quotient was divided into groups depending on the presence or absence of hypertension (HT).

Results. Out of the total number of patients 47.5 % were women aged between 39-70, the average age being 56.05 years, and 52.5 % men aged between 39-73 with average age of 54.76 years. The average values for SBP were 146.75 mmHg, and 89mmHg for DBP. Hypertension was determined in 75% of patients, 25% being normotensive. The anamnestic data revealed that in 45% of the HT patients, the diagnosis of HT preceded that of diabetes; in 23% HT was diagnosed concomitantly with diabetes and in 32% HT occurred during the course of diabetes. According to the HT classification we determined that 57% had first degree HT; 30% - second degree HT, and 23% - third grade HT. In the non-HT group 73% patients were non-obese (normoponderal and overweight), 27% were obese, while in the HT group 42% were non-obese patients, and 58% - obese. There is a statistically significant correlation between BMI and HT ($p < 0.05$). By analysing the data, we noted that neuropathy was present in 100% patients with HT and 93.33% normotensives; retinopathy - in 30% of the HT group, and 20% in the normotensive group; cardiopathy in 33.33% with HT, and in 23.33% normotensives; nephropathy in 6.42% with HT, and in 4.44% normotensives. The questionnaire compared the level of stress between normotensives and HT, and determined that 34% nonHT patients had a medium stress level, 23% high stress levels, and 8% an exaggerated stress level. Out of the HT patients 66% had a medium stress level, 77% a high stress level, and 82% an exaggerated stress level.

Conclusions. Our results confirmed the results of existing research data regarding the high incidence of hypertension in patients with type 2 diabetes. Obesity has a major negative impact on the onset and evolution of hypertension. Most complications have been observed in HT patients, and therefore we can not state what was the negative impact of hypertension on diabetes complications. Prevention of stress situations has a beneficial effect on blood pressure.

Key words: hypertension, diabetes, risk factors, complications.

38. INDICATORS OF IMMUNE INFLAMMATION IN PATIENTS WITH DIABETIC NEPHROPATHY AND ASSOCIATED OBESITY

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Introduction. The pathogenesis of diabetes type II and obesity is based on a mix of genetic factors, disorders of the immune balance and lifestyle factors. Combination of this pathological processes increases the risk of vascular complications and becomes a significant social and economic problem of mankind. This negative trend requires a detailed examination of all possible causes of chronic inflammation, which is one of the key factors in kidney failure progression.

Aim of the study. To evaluate the indicators: interleukin-1(IL-1), interleukin-6(IL-6), and transforming growth factor- β 1(TGF β 1) in patients with diabetic nephropathy(DN) and obesity.

Materials and methods. For the study 43 patients with diabetes type II were selected, aged between 41 - 63 years, with at least 10 years duration of the disease. Glomerular filtration rate (GFR) in all patients was not less than 90 ml/min. All patients were divided into two groups: group 1 included patients with DN stage III without concomitant obesity (22 people), the 2nd group included patients with DN stage III and I degree obesity (21 people). The control group consisted of 22 healthy subjects. Exclusion criteria: courses of antibiotic therapy of any duration for the last 4 weeks, cancer. In addition to general clinical methods of examination, all patients underwent determination of IL-1, IL-6 and TGF β 1 levels.

Results. Analysis of clinical and laboratory parameters examined patients showed increasing levels of IL-1, IL-6 and TGF β 1 compared with those parameters of healthy subjects($p < 0,05$). Levels of proinflammatory cytokines were higher in patients with concomitant obesity.

Conclusions. The analysis of clinical and laboratory parameters revealed the presence of an imbalance in immunogram in obese and non-obese patients with chronic kidney disease. However, the changes in patients with II degree obesity were more significant. In this same group the patients showed a more pronounced impairment of renal function, indicating a more severe course of disease in obese patients. It means that this variant of the disease is more unfavorable.

Key words: diabetes, nephropathy, obesity, inflammation markers

39. OBESITY AND RENAL CELL CANCER

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Introduction. Renal cell carcinoma(RCC) represents approximately 2-3% of all malignancies with variations in regional incidence. Over the last two decades the incidence of RCC increased by about 2%, both worldwide and in Republic of Moldova. Obesity is one of the well-established risk factors for RCC. Obesity has also been increasing throughout the world. The increasing prevalence of obesity might therefore, at least partially, explain the increasing incidence of renal cell cancer.

Aim of the study. This study was undertaken in order to assess whether obesity carries higher risk for renal cell cancer.

Materials and methods. This study included 734 patients, 438 (59.7%) males and 296 (40.3%) females, with histopathologically confirmed renal cell carcinoma, who were treated between 2013 and 2015 in the Department of Urology of the Oncology Institute of the Republic of Moldova. Diagnosis of obesity was confirmed by the World Health Organization standard recommended method by using body mass index (BMI) scale. Variables examined also included age and sex. BMI was investigated by using established categories for normal weight (< 25 kg/m²), overweight (25-30 kg/m²), and obese (≥ 30 kg/m²).