

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

Authors: **Carolina Piterschi, Alexandru Piterschi**

Scientific advisers: Lorina Vudu, MD, PhD, Associate Professor, Department of Endocrinology, Anotolie Mustea, MD, PhD, Associate Professor, Department of Urology, Oncology Institute of the Republic of Moldova

Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova

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).

Results. The peak incidence of RCC was at 63 years. There was a 1.5:1 male predominance. The study found an increased risk of RCC associated with overweight and obesity among both male and female adults: BMI <25 kg/m² - 38%; BMI 25-30 kg/m² - 30%; BMI ≥30 kg/m² - 33%. The rate of obesity was slightly higher in women than men (P < 0.005).

Conclusions. These findings indicate that overweight and obesity was positively associated with increased risk of renal cell cancer, equally strongly among both males and females.

Key words: obesity, BMI, renal cell cancer.

40. THE CLINICAL AND PARACLINICAL PROFILE OF PATIENTS WITH DISTAL SYMMETRIC POLYNEUROPATHY

Authors: **Tatiana Croitoru, Grama Eugeniu**

Scientific adviser: Harea Dumitru, MD, University assistant, Department of Endocrinology

Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova

Introduction. Diabetes mellitus (DM) is a chronic metabolic disorder that leads to a variety of complications. The most common is diabetic polyneuropathy, particularly distal symmetric polyneuropathy (DSP), affecting more than 50 % of patients. It is a significant risk factor for occurrence of foot ulcers and is the leading cause of lower limb amputations. Besides, it is linked with a decreased quality of life, both physical and mental.

Aim of the study. To assess the clinical features associated with the presence and severity of peripheral diabetic polyneuropathy.

Materials and methods. The study included 90 randomly selected patients hospitalized in the Endocrinology department, in a municipal clinic in Chisinau, Moldova. Inclusion criteria were presence of DM type I or type II and age >18 years. The clinical history was documented and a directed clinical examination was performed. The presence and severity of DSP was assessed using Toronto Score.

Results. In our study, according to Toronto Score, 16 patients had no DSP, 22 - incipient DSP, 27 - moderate DSP and 25 - severe DSP. The average duration of diabetes was 5.8 for no DSP group, 9 for incipient DSP group, 13.6 for moderate DSP group and 17.5 for severe DSP group (P<0.01). In the no- and incipient DSP groups combined, there were more type I patients (26%) than in the moderate and severe DSP group (8%). The prevalence of obesity was high, 43 patients of 90 had body mass index (BMI) > 30. Besides, the average BMI was found to be higher in those with moderate and severe DSP than in those with no or incipient DSP, 31.9 versus 27.8 (P<0.01). A history of arterial hypertension was present in 80% of all cases, but only in 63% for the no- and incipient DSP group versus 93% for the moderate and severe DSP group. A higher prevalence of hypertension and obesity in those with a more severe DSP can be partially explained by the predominance of type II DM. Hyperlipidemia was detected in 47% of all patients but there was no significant difference between the samples. Retinopathy was found in 50% of patients with no- or incipient DSP and in 67% of those with moderate and severe DSP but the P value was too high. The symptoms reported by patients were weakness (80%), cramps (71%), pain (62%), tingling (52%) and numbness (36%).

Conclusions. The study reveals that DSP is very common (82 %) in patients with DM and its severity is associated with diabetes duration and higher BMI. The comorbidities of DSP such as hypertension, retinopathy and hyperlipidemia were also frequent. The screening for diabetic polyneuropathy helps define the clinical profile of the patient and should be started at the moment of diagnosis of DM, thus avoiding often disabling complications.

Key words: diabetes mellitus, distal symmetric polyneuropathy.

DEPARTMENT OF INTERNAL MEDICINE, CARDIOLOGY