

differences in the initial LV wall dimensions between groups IVS  $15.6 \pm 3.4$  and  $13.72 \pm 3.3$  mm  $p=0.015$ ; LV PW  $14.5 \pm 2.7$  and  $12.7 \pm 2.7$  mm  $p=0.005$ , and determined the correlation coefficients for MM dynamics for initial IVS  $r(x,y)=-0.56$ ,  $p=0.02$  and LV PW  $r(x,y)=-0.71$   $p=0.002$ . Mathematical model for calculating LV MM dynamics incorporated the dimensions of each ventricular wall of the left ventricle. One could assume that statistical significance could depend on the presence of these parameters in the calculation formula for the myocardial mass. However, if it was true, enddiastolic dimension would also predict LVMMregress which was actually not the case. To eliminate limitations of comparative method of study, we performed the correlation analysis that confirmed the presence of relationships between MM dynamics and the initial values of IVS and LVPW and did not show any association with LV cavity size. Moreover, the analysis of multiple regressions confirmed strong individual significance of the initial

values of LVPW and IVS, but not initial values of end-diastolic dimension, heart rate, and arterial blood pressure.

**Conclusion:** Data of our study demonstrated that administration of recently proposed RSD method for treatment of true resistant hypertension was associated with the reduction in LV MM and with the alleviation of diastolic dysfunction of the left ventricle. We identified group of patients who benefited from the procedure and elucidated the predictors of the improvement in cardiac structure and function. Drug therapy, gender, anthropometry data as well as the initial and post-RSD values of arterial blood pressure and heart rate were comparable in patients with and without decrease in LV MM. The following parameters of the LV wall thickness predicted regression of LV MM: M/MeIVS= $15.6/15.0$  mm and M/MeLVPW= $13.9/13.5$  mm. These characteristics of IVS and LVPW may be used for an identification of the potential responders to RSD treatment.

## THE STUDY OF ADHERENCE TO THERAPY IN PATIENTS WITH HYPERTENSION

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**The aim:** to investigate the effectiveness of treatment of patients, depending on adherence to therapy.

**Materials and Methods:** We examined men and women with hypertension Stage 2, Stage I and II degree, the initial examination conducted 2 Department of Cardiology Clinic Tashkent Medical Academy, followed by outpatient counseling in the clinic. 28 patients with an average age of  $48,3 \pm 3$  treatment was analyzed. Then carried out a comparative analysis of drug and non-drug treatment based on adherence to therapy. We used the sociological method using designed questionnaires. Studied the main factors of adherence to treatment in patients with hypertension.

**Results:** Permanent treatment was performed only in 16% of patients with hypertension. Patients exposed diagnosis prescribed treatment of hypertension and of them from 18 do 60% of patients within one year to discontinue antihypertensive drugs, and among those who continued to be treated, most

often to skip the next dose. Women were more committed to the therapy than men. There is also a commitment to the treatment improved with age. Younger took drugs on a case by case basis. Patients diagnosed with early hypertension are more likely to stop treatment, compared with patients in whom the diagnosis is made for a long time. Increased frequency of discontinuation of treatment in the early stages of the disease was due to a good state of health of patients and not enough explanation of the risk of a physician for cardiovascular and cerebrovascular complications. Not all patients was explained by blood pressure control level.

**Conclusions:** On adherence to treatment of hypertension affects many factors-social, behavioral, cognitive. Successful treatment of the disease requires the close cooperation of the doctor and the patient. Regular blood pressure measurement by the patient or family at home also improves adherence to treatment.

## NEUROCIRCULATORY DYSTONIA AND IRRITABLE BOWEL SYNDROME IN YOUNG AGE PATIENTS - CLINICAL PICTURE OF THE COMORBID PATHOLOGY AND INTERDISCIPLINARY RELATIONSHIP

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**Actuality:** Irritable bowel syndrome (IBS) and neurocirculatory dystonia (NCD) are the most common outpatient therapeutic diseases. IBS and the NCD can not be considered exclusively gastrointestinal disorders or disorders of the cardiovascular system or nervous system disease in the classic sense. These diseases are considered as a complex psycho-neurotic and somatoform disorders. The pathogenetic similarity contributes to a significant expression of the IBS in patients with NCD - 39% of cases. On the other hand, in patients with IBS symptoms of NCD appear in 75% of cas-

es. Thus, the combination of IBS and NCD is a combination of two chronic functional diseases with similar pathogenesis, psychoneurotic and visceral presence of clinical manifestations, which do not affect on life expectancy, but significantly impairs quality of life.

**Objective:** Investigation of the clinical features of IBS in young patients with NCD.

**Materials and methods:** 32 patients with IBS (9 men and 23 women) on the background of NCD were examined in outpatient conditions. The age of patients was from 20 to

39 years. 18 patients suffered from hypertensive type NCD (I group), the other patients suffered from hypotonic type NCD (II group). Both groups were comparable with each other on the main characteristics (sex, age, duration of NCD and IBS anamnesis etc.). Verification of the diagnosis of IBS and NCD was made at the previous stages of patient examination. In all cases, the diagnosis of NCD chronologically preceded by the establishment of a diagnosis of IBS. Statistical analysis of the results of the study included determination of nonparametric test -  $\chi^2$ . The critical level of significance at check of statistical hypotheses was 0.05.

**Results:** The main IBS - dependent complaints of examined patients in both groups (observed in 100% of cases) were abdominal pain syndrome and disorders of defecation. The inability patients to distinguish between physical pain and emotional response, inability to determine the characteristics of pain (intensity, duration, sometimes - localization) was identified in the study. The objective state of patients in both groups had never corresponded to the severity of their complaints. The dependence of the localization of abdominal pain on the type of NCD has been revealed. Patients of group I complained of diffuse pain (50% of cases), right-sided pain (27.8% of cases), left-sided pain (22.2% of cases). Patients of group II complained of diffuse pain (21.4% of cases), right-sided pain (21.4% of cases), left-sided pain (57.2% of cases). Differences in localization of abdominal pain between patients groups I and II were significant ( $df = 2, \chi^2 = 6,479, p = 0.039$ ). On palpation of the abdomen in 33.3% of patients from group I and in 35.7% of patients from group II there

was a discrepancy between the localization of pain during palpation and individual pain sensations of patient. Reliable differences in the expression of certain disorders of defecation between groups of examined patients were not revealed.

The conditions under which occurred above abdominal complaints were studied. A clear link between the deterioration of the condition of the bowel (IBS) and an increase in expressivity cardiovascular manifestations (NCD) was found in the patients in group I: 14 (77.8%) patients reported a combination of abdominal pain with palpitations, irritability, hot flashes. Only 6 (42.9%) patients of group II reported on the relationship between symptoms of IBS and symptoms of NCD. This difference between the groups of patients were significant ( $df = 1, \chi^2 = 4,097, p = 0.043$ ). Stress situations as exacerbation factor trigger of IBS indicated 12 (66.7%) patients in group I and 6 (42.9%) patients in group II. However, the difference in this index between the groups were not significant -  $df = 1, \chi^2 = 1,814, p = 0.178$ .

**Conclusions:** The clinical picture of IBS in patients with NCD has its own characteristics and, in a certain way, depends on the type of NCD. In patients with NCD by hypertensive type in the clinic of IBS is dominated diffuse abdominal pain. Patients with NCD by hypotonic type often complain on abdominal pain left-sided localization. Also, in patients with IBS on the background of hypertensive type NCD noted the direct relationship between the occurrence of abdominal pain and the occurrence of clinical symptoms of NCD. These clinical features of IBS on the background of NCD to consider the doctor in his practice.

## ECHOCARDIOGRAPHIC PARAMETERS INVOLVED INEVOLUTION OF DIASTOLIC DYSFUNCTION IN HYPERTENSIVE PATIENTS WITH METABOLIC SYNDROME AND ACUTE MYOCARDIAL INFARCTION

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**Objective:** Pseudonormal and restrictive diastolic pattern of mitral inflow were associated with dilatation and cardiac mortality in first year after acute myocardial infarction (AMI). Metabolic syndrome including arterial hypertension which is one of the components of this disorder before the acute coronary event is known to be a factor linked to an increased enddiastolic pressure.

**Purpose of the study:** to find a correlation between echocardiographic parameters of filling pressure at discharge and pattern of mitral inflow at one year after AMI in hypertensive patients with metabolic syndrome (MS).

**Materials and methods:** A number of 42 hypertensive patients with MS (26 males and 16 females), admitted with acute myocardial infarction with ST segment elevation were evaluated during the first week by: clinical examination, 12 lead standard ECG, echocardiographic measurement of: left atrium volume index (LAVi), left ventricular mass index (LVMI) using transthoracic echocardiography; cut off levels for left ventricular hypertrophy (LVH) were  $LVMI > 115 \text{ g/m}^2$  in males and  $> 95 \text{ g/m}^2$  in females; mitral inflow, pulmonary venous inflow measurement using Doppler echocardiography, tissue Doppler echocardiography at lateral and medial corner of

mitral annulus, color Mmode echocardiography.  $E/E'$  average ratio,  $E/vp$  ratio and  $ar$  duration were calculated. After one year the pattern of mitral inflow was evaluated using transthoracic Doppler echocardiography. All patients received fibrinolytic therapy. LVEF measured by Simpson method was less than 45%.

**Results:** Mean values of parameters of filling pressure in hypertensive patients with MS with LVH and without reperfusion were:  $VASi: 35.12, p = 0.0008, E/E': 14.81, p = 0.042, E/vp: 1.97, p = 0.0037, ar-A: 28.82, p = 0.008$ . Using chi squared (CS), odd ratio (OR) and relative risk (RR) significant correlations were found between mitral pattern and:  $VASi > 32 \text{ ml/m}^2, CS: 6.52; E/E' > 14, CS: 10.18, E/vp < 1.5, CS: 10.7, ar-A > 30 \text{ ms}, CS: 40.105$ .

**Conclusions:** The highest mean values of echocardiographic parameters of increased filling pressure at discharge after an acute myocardial infarction were found in hypertensive patients with MS with LVH and without reperfusion. A correlation was found between these increased mean values at discharge and mitral inflow after one year suggesting a worse evolution in these patients.