torpid course of AS, required the coordination of the medicines' compatibility and complicated the realization of complex treatment of AS and comorbid disorders.

Therefore, comorbid pathology should be detected and treated earlier in order to reduce its negative impact on disease outcome, to provide better control of the AS activity and prevent possible complications.

Grechko S.I.

COMPLEX HEART RATE CONTROL IN PATIENTS WITH ACUTE CORONARY SYNDROME

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One of the main factors influencing a short-term and remote prognosis of patients experienced acute myocardial infarction is heart rate. Administration of Ivabradine decreases HR at the expense of inhibition of electric activity of the sinoatrial node (Keith-Flack node) resulting in reduction of heart rhythm, increase of diastolic time during perfusion as a result of decreased oxygen supply to the myocardium without any harmful changes – arterial pressure values, coronary blood supply and contractile capacity of the myocardium. 135 patients with ACS were included into the study. The possibility to improve treatment and clinical-prognostic role of ACS reduction was assessed with administration of Ivabradine. Pharmacological therapy correlated with the national recommendations concerning management of patients with ACS. The rates of HR, BP, ECG indices were assessed after admission to the hospital: during an acute period (on the 2- 4 th day, the 3rd day on an average), during subacute period (on the 14th day) of staying in the hospital. The patients were divided into two groups: the one included patients receiving Bisoprolol with the aim of control HR (group I, 93 patients), and another one - patients receiving Bisoprolol in combination with Ivabradine (group II, 42 patients). Analysis of the main parameters of the clinical-instrumental examination was not indicative of reliable differences between the patients of the examined groups at the beginning of treatment. The target levels of SP and DP were achieved in all the patients of the examined groups. The patients with complicated course of ACS (subgroup A) demonstrated reliably lower decrease of HR, than those without variant angina and/or relapse of MI (subgroup B) during all the stages of the hospital investigation. Similar dynamics of HR changes can be found in both groups of HR correction. Maximal decrease of HR was found since the first days of the study, which was similar for both groups in comparison. Considering selective decrease of HR without loss of the myocardial contractility, Ivabradine can be recommended as an effective agent to treat ACS without decrease of ejection fraction.

Monotherapy with Bisoprolol is indicative of an effective control of the heart rhythm in patients with ACS, but after a combined therapy with Ivabradine and Bisoprolol better results were found during the first 3-4 days of treatment. Insufficient decrease of HR in patients with ACS during the first 3-7 days of hospitalization is associated with an increased risk of post-infarction angina or relapse of myocardial infarction.

Hontsariuk D.O.

COMBINATION OF CHRONIC PANCREATT WITH ISCHEMIC HEART DISEASE; DIAGNOSTIC VALUE OF C-REACTIVE PROTEIN AND CITOKIN LINK

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The purpose and tasks of the study. To evaluate the role of C-reactive protein (CRP), proinflammatory cytokines, interleukin 1β, tumor necrosis factor-alpha (FNP-α), type 1 vascular endothelial adhesion molecule in comorbidity with chronic pancreatitis for coronary heart disease as a marker of chronic systemic inflammation, which is a unifying mechanism in their flowing.

We examined 40 patients with chronic pancreatitis (Group I), 40 patients with comorbidity of chronic pancreatitis with ischemic heart disease (II group). To study the characteristics of the chronic low-intensity generalized inflammatory reaction, levels of CRP, IL-1β, TNF-α and sVCAM-1 were determined using the immunoassay method.

In patients with a comorbidity of chronic pancreatitis with ischemic heart disease (IHD), significant hyperproduction of proinflammatory cytokines (interleukin1β, tumor necrosis factor, sVCAM-1 and CRP compared with the isolated course of chronic pancreatitis and results in practically healthy individuals as shown in Table) was established.

Table

The content of C-reactive protein (C-RB), interleukin-1β (IL-1β), tumor necrosis factor alpha (TNF-α), vascular endothelial adhesion molecule (VCAM) in the serum of the examined individuals. (M ± m)

Indicators	Practically healthy (n=20)	Patients with chronic pancreatitis (CP) (n=40)	Patients with CP with concomitant IHD (n=40)
CRP (mg/ml)	1,13±0,35	2.37±0.11*	7.31±0.37*/**/
TNF-α (pg/ml)	4,12±0,17	5.86±0.14*	6.83±0.28*/**
IL-1β (pg/ml)	8,63±0,54	24,11±1.82*	31.57±1.05*/**/
sVCAM-1 (ng/ml)	368,3±20.21	791.18±27.68*	1220.83±39.46*/**

Notes: * - the reliability of the difference (p <0.05) as compared to those of practically healthy individuals; ** - reliability of difference (p <0.05) in comparison with the indices in patients with CP.

The comorbidity of chronic pancreatitis with ischemic heart disease worsens clinical symptoms, determines the progression and prognosis of diseases. The reason for this may be latent-running chronic systemic low-intensity inflammation, which manifests itself as a systemic impression and wavelike activation of the cascade of proinflammatory cytokines. The development and persistence of the immune cytokine mechanism in a comorbid flow of chronic pancreatitis with coronary heart disease creates a precedent in such target organs as myocardium and pancreas. In this connection, in order to control the intensity of chronic systemic inflammation, one may propose to take into account the high level of CRF, proinflammatory cytokines when determining the treatment tactics and carrying out rehabilitation and preventive measures.

Horbatiuk I.B.

THE ROLE OF ENDOTHELIAL DYSFUNCTION IN THE PROGRESSION OF CHRONIC CHOLECYSTITIS

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Endothelial dysfunction is the main factor that leads to the development and progression of atherosclerosis.

The aim of the study was to set the degree of development and the role of endothelial dysfunction in the genesis and progress of chronic cholecystitis (CC) in patients with ischemic heart disease (IHD) and obesity.

136 patients were examined: Group 1 (n = 28) - CC; Group 2 (n = 30) - CC on the background of IHD; Group 3 (n = 30) - CC against the backdrop of IHD and 1-2 grade obesity; Group 4 (n = 30) - CC, cholesterosis gallbladder (CG), IHD, obesity 1-2 grade; Group 5 (n – 18) - CC and CG. The functional state of the endothelium was studied by blood levels of stable metabolites of nitrogen monoxide (NO), the activity of endothelial (eNOS) and inducible (iNOS) NO-synthase and endothelin-1 (ET-1) by ELISA.

Results of the study showed that in 97,8% of examined patients with CC a significant increase in the content of stable NO metabolites in the blood ($p < 0,05$) was found. Patients of 3rd group experienced substantial growth content of NO in blood (2,4 fold) compared to the 1st group (1,9 fold) and 2nd group (1,6 fold) ($p < 0,05$). It was established that the stress intensity increased by joining IHD and obesity for CC and cholesterosis (an increase of 2,8 times to 2,1 times, $p < 0,05$). The 4th group: the content of NO in blood exceeded compared to the 1st group by 17,7% ($p < 0,05$). The 4th group found most pronounced indicators: overproduction of iNOS (growth 5,2 times) and eNOS deficit (down by 53,0%) ($p < 0,05$). So, revealed endothelial dysfunction in patients with comorbid disorders CC by pathological induction of iNOS activity and increasing of nitrate causes hypokinetic gallbladder dysfunction and progression CC that deepens with increasing degree of obesity.

Ilashchuk T.O.

CLINICAL AND INSTRUMENTAL MARKERS OF ACUTE MYOCARDIAL INFARCTION COMPLICATED WITH ACUTE HEART FAILURE FLOW EVALUATION

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Determination of prognosis within first year after acute myocardial infarction (AMI) remains one of the most topical issues in cardiology.

368 patients were examined with the purpose to create a prognostic model of acute myocardial infarction complicated with acute heart failure flow. Some risk factors of lethal outcome were distinguished.

Transmural AMI occurred in 141 (38.32%), macrofocal AMI – in 166 (45.11%) and microfocal AMI – in 61 (16,57%) cases as determined by results of a comprehensive clinical-instrumental examination including detailed complains, taking anamnesis, careful clinical investigation, electrocardiography in dynamics. 123 (33,42%) persons out of 368 examined died throughout observation period, in particular, 94 (25,54%) patients – during 28-day staying in hospital, and 29 (7,88%) during a year of follow up.

With a purpose of creating prognostic models of AMI complicated by acute left-ventricular failure (ALVF), all patients were divided into 2 groups: group 1 – with favorable AMI outcome, and group 2 – with fatal outcome.

Patients who died were averagely 9 years older as compared to those with favorable outcome. Males were prevalent amongst ($p<0,001$). Besides, relapsed AMI was registered much more frequently in 2 group patients (79,6% vs 39,19% in group 1, $p<0,001$). Class 2-4 ALVF signs by T. Killip were significantly more frequent in group 2 patients ($p<0,001$). Frequency of arterial hypertension (AH) and diabetes mellitus (DM) presence in anamnesis was significantly higher in group 2 patients as well ($p<0,01$). Risk factors prevalence analysis among patients of both groups revealed significant prevalence of active smoking ($p<0,01$) and obesity ($p<0,001$) in group 2 patients as well.

Single-factor regression analysis results were indicative of the fact that risk of lethal event occurrence increased with age: increase of risk by a factor of 1.5 follows each additional 5 years over 50. Risk of lethal event appearance raised twice with every ALVF class by Killip increase, 1.02 times more with income HR increase on 10 b.p.m. after 60 b.p.m., 1.3 times more in patients with DM, 1.15 times more in case of obesity presence, three times more in patients with chronic heart failure (CHF), 1.2 times more in case of ejection fraction (EF) below 40% detection during 1-2 days after patient's admission, and 4.5 times more in case of anterior AMI localization.