and functional state of myocardium in patients with essential hypertension in combination with stable angina pectoris. Stress-echocardiography (ECHO CG) under the conditions of transoesophageal electrocardiostimulation (TEES) was performed and 24-hour Holter ECG monitoring (HM) was recorded in 172 patients (98 men, mean age 52.2±1.8 years) before and after 4 week treatment period with irbesartan (80 mg/day orally). Under the irbesartan action the frequency of the cessation of TEES increased from 138.4±2.2 to 149.6±1.4 imp/min (p<0.001), while the summary ST-segment depression decreased from 4.86±0.22 to 3.12±0.13 mm (p<0.001). The results of EchoCG have testified the increase of ejection fraction (EF) at rest from 50.1±0.7 to 58.5±0.8 % (p<0.001). The decrease of EF at peak of TEES was -10.5 % at the beginning and -3.2 % at the end of irbesartan treatment period. According to the data of HM, there was significantly reduced the frequency (from 2.1±0.3 to 1.3±0.1 episodes, p<0.01) and the total duration of painful ischemic episodes (from 37.3±5.5 to 20.5±4.6 minutes, p<0.02). The same tend was registered for silent ischemic episodes: the frequency decreased from 3.5±0.5 to 2.5±0.4 episodes (p>0.2) and total duration from 51.7±6.4 to 42.1±4.8 minutes (p>0.2). Thus, the results show that irbesartan treatment has positive effect on coronary reserve and improves myocardial contractility in patients with essential hypertension associated with ischemic heart disease.

Key Words: essential hypertension, irbesartan, ischemic heart disease

P-259
AMLODIPINE: INFLUENCE ON REGIONAL MYOCARDIAL CONTRACTILITY
Victor K. Tashchuk, Pavlo R. Ivanchuk, Ivanna A. Tashchuk. Dept. of Cardiology, Bukovinian State Medical Academy, Chernivtsy, Chernivtsy District, Ukraine; Dept. of Cardiology, Bukovinian State Medical Academy, Chernivtsy, Chernivtsy District, Ukraine; Dept. of Cardiology, Bukovinian State Medical Academy, Chernivtsy, Chernivtsy District, Ukraine.

In order to determine the efficiency of amlodipine’s (Pitzer) influence on the capability of the left ventricular (LV) myocardial contractility, 40 patients with essential hypertension and ischemic heart disease (stable angina pectoris) were examined after the dynamic contractility of the left ventricle myocardium was tested. Patients were examined during the acute period of the amlodipine test and under the background of 10 days of treatment. Clinical effect of amlodipine is related to the blood pressure stabilization. In average on 3rd day of treatment, amlodipine lead to systolic blood pressure decrease up to 24.7% (p<0.05) and diastolic blood pressure decrease up to 24.2% (p<0.05). Bicycle ergometry was carried out until clinical and diagnostic criteria were reached, the test was stopped when 92.2% out of the calculated sub maximum load was carried out. Echocardiography at that point failed to show any substantial dynamics of the volume indexes and the general ejection fraction (GEF). On the other hand analyses of the regional ejection fraction (REF) testify, that the use of amlodipine, already during the acute period of testing, lead to it’s improvement, the changes were authentic for REF8 (p<0.05), in average the changes were authentic for REF8 (p<0.05). At the height of the recurring amlodipine test, compared to the initial amlodipine test, similar change tendencies were registered along with the increase of the initial REF1-2 and REF6-12 in view of REF3-5 decrease. Thus, it is defined that amlodipine, even in a short treatment term, possesses positive influence on the regional contractility.

Key Words: essential hypertension, amlodipine, regional contractility

P-260
ANTAGONISTS OF ANGIOTENSINE RECEPTORS AND ACUTE STRESS-TEST : POSSIBILITY IN TREATMENT OF HYPERTENSION
Victor K. Tashchuk, Svetlana I. Grechko. Dept. of Cardiology, Bukovinian State Medical Academy, Chernivtsy, Chernivtsy District, Ukraine; Dept. of Cardiology, Bukovinian State Medical Academy, Chernivtsy, Chernivtsy District, Ukraine.

46 patients who had essential hypertension on background concomitant ischemic heart disease were examined with the aim of study the antiischemic effect of antagonists of angiotensin II (AT1) receptors (irbesartan, valsartan and eprosartan), using pair stress-test – transoesophageal electrocardiostimulation (TEES). The frequency of TEES cessation increased using valsartan (130.1±1.5 to 135.3±2.1 imp/min, +4.0%, p<0.05), insignificantly in case of irbesartan usage (135.4±2.4 to 140.6±1.8 imp/min, 3.9%, p<0.05) and eprosartan (127.6±1.8 to 131.5±1.4 imp/min, 3.1%, p<0.05). The decrease of summary depression of the ST-segment (EST) was registered while using irbesartan (6.44±1.22 to 5.32±0.34 mm, -17.4%, p<0.001) and valsartan (5.81±0.21 to 5.08±0.14 mm, -12.6%, p<0.01) with the increase tendency for eprosartan (5.50±0.27 to 5.26±0.13 mm, -9.6%, p<0.05). It’s found out that the antiischemic effect of the antihypertensive drugs - antagonists of angiotensin II (AT1) receptors can be connected with the decrease of vessels α-adrenoreceptors activity and the improvement of myocardial metabolism, the interlock of angiotensin II on the level of coronary vessels, which is accompanied by the betterment of coronary blood circulation.

Key Words: essential hypertension, antagonists of AT1-receptors, transoesophageal electrocardiostimulation

P-261
THE SENSITIVITY OF THE BARORECEPTOR REFLEX IN SPONTANEOUSLY HYPERTENSIVE RATS IS INCREASED BY CHRONIC VASOPEPTIDASE INHIBITION
Alexandra Thormael, Andreas Dendorfer, Walter Rauch.
Peter Dominiak. Institute of exp. & clin. Pharmacology and Toxicology, University Clinic of Luebeck, Luebeck, Germany.

The new class of combined inhibitors of Angiotensin-Converting Enzyme (ACE) and Neutral Endopeptidase (NEP) named vasopeptidase inhibitors has a potential effect on the sympathetic nervous system by influencing the degradation pathways of many neurotransmitters in the central nervous system (CNS). For some of them (i.e. the natriuretic peptides) it is shown that they can modulate the activity of the sympathetic nervous system.

To demonstrate the significance of NEP in this respect, we investigated the baroreceptor sensitivity (BRS) in rats chronically treated with a vasopeptidase inhibitor compared with single inhibition of ACE.

Spontaneously hypertensive rats (SHR) were treated orally for 17 days either with placebo, ramipril (1mg/kg) or the vasopeptidase inhibitor omapatrilat (30 mg/kg). On day 16, heart rate variability (HRV) was tested during 30min of silence followed by 3 min noise stress (white noise, 60 dBA) in conscious rats. For examination of BRS, the mean arterial pressure (MAP) was altered by infusion of phenylephrine and sodium-nitroprussid and the responding changes in heart rate (HR) were determined. The next day, rats were anaesthetized with pentobarbital (60 mg/kg, i.p.), and the splanchic nerve was prepared for extracellular recording of sympathetic nerve activity (SNA). The response of SNA to blood pressure alterations (range: 50-200 mmHg MAP) was detected.

Ramilipril or omapatrilat induced equivalent long-term reductions in systolic blood pressure (-18.4 and -23.1 mmHg vs. placebo, respectively) and in plasma ACE activity (-81.9% and -72.7% vs. placebo, respectively). In conscious rats, neither HR nor HRV under basal as well as noise stress conditions, was influenced by treatment. Maximum suppres-