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Use of Coraxan in Patients with Cardiac and Pulmonary Pathology

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Abstract:

the article studied the effectiveness of the drug Coraxan in the complex therapy of patients with coronary heart disease (CHD) and arterial hypertension (AH) in combination with chronic obstructive pulmonary disease (COPD). The use of Coraxan in the treatment of patients with concomitant cardiopulmonary pathology leads to a significant decrease in blood pressure (BP) and heart rate (HR), and a decrease in angina attacks. Coraxan increases exercise tolerance (PE).

Keywords: *Coraxan, coronary heart disease, blood pressure, arterial hypertension, chronic obstructive pulmonary disease, heart rate, physical activity.*

Currently, the problem of the associated pathology of COPD and coronary artery disease, hypertension should be considered not only as a combination of different diseases, but also as a mutually aggravating condition with common pathogenetic links. The incidence of both cardiovascular and bronchopulmonary pathologies is steadily increasing throughout the world [1, 2].

The leading cause of mortality in patients with COPD is not respiratory failure, but cardiovascular disease events (CVD), which are found in at least 50% of COPD patients, while the presence of the latter increases the risk of developing CVD by 2-3 times [3, 5].

Today, there are three groups of drugs for heart rate control: β-blockers (β-blockers), non-dihydropyridine calcium channel blockers and IF-inhibitors. The leading place in the treatment of CVD rightfully belongs to β-blockers [6, 7]. In accordance with the recommendations of the European Society of Cardiology and national recommendations, for the treatment of patients with stable angina pectoris in the presence of contraindications to the use of β-blockers, it is recommended to use a new treatment strategy - the use of IF channel inhibitors, the only representative of which is ivabradine (Coraxan, Servier, France), which has a fundamentally a new antianginal mechanism of action [4, 6].

Purpose of the work: to study the therapeutic effectiveness of Coraxan in complex therapy (CT) of patients with ischemic heart disease and hypertension in combination with COPD.

Materials and methods

14 patients aged 53-70 years with grade II-III COPD in the acute stage were examined. Stable angina pectoris of class III III and stage II hypertension were recorded in all patients. Risk IV.

Patients received basic therapy (nitrates, angiotensin receptor blockers (BAR), inhaled bronchodilators, diuretics, antibiotics, mucolytics) and Coraxan 7.5 mg 2 times a day (IF-inhibitor of selective and specific action - ivabradine) for 8 days. The study program included daily assessment of blood pressure, heart rate, number of respiratory movements (NPV), pulse oximetry - SPO2, six-minute walk test (SWT). Spirography. ECG and echocardiography were performed upon admission to the hospital and after 8 days.

Results and discussion

During daily recording, a decrease in blood pressure was noted. The level of systolic blood pressure (SBP) decreased by 16%, diastolic blood pressure (DBP) by 15%. There was a significant decrease in heart rate (on average by 6-7 beats/min.) Respiratory rate 4-6 times per minute. An increase in peripheral blood saturation by 96% was detected. When conducting

TSH distance traveled by patients before treatment averaged 246 ± 90 m, after treatment 275 ± 94 m. An increase in all indicators of external respiration function (RF) was revealed: vital capacity of the lungs (VC) increased by 4.5%, forced vital capacity lungs (FVC) - by 3.8%, forced expiratory volume (FEV1) - by 8.2%

According to echocardiography, there was a trend toward improvement in intracardiac hemodynamics: the left atrium (LA) decreased by 2.5%, left ventricular end-diastolic size (LV ESD) - by 4.4%, left ventricular end-systolic size (LV ESD)) by 7%, right atrium by

3.4%, ejection fraction (EF) increased by 8%. The diastolic function of the right ventricle improved: the E/A index decreased before treatment - 1.1 ± 0.04, after treatment - 0.81 ± 0.03.

Thus, the use of Coraxan in CT scans of patients with combined cardiopulmonary pathology leads to a significant decrease in blood pressure and heart rate, a decrease in angina attacks, and an increase in tolerance to exercise. Coraxan has a moderate effect on FDV and improves intracardiac hemodynamics.

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