



96,62 (92,32±0,57) %. Дослідження рівня Ca^{++} не проводилось в зв'язку з попереднім введенням препаратів кальцію.

Висновки. Аналізуючи отримані результати можна зробити висновок що після радикального видалення солітарної аденоми прищитоподібної залози при первинному гіперпаратиреозі рівень кальцію іонізованого через 2 години після операції знижується щонайменше на 30 % від його рівня до операції. Даний метод діагностики може використовуватися в ранньому післяопераційному періоді як діагностичний критерій радикальності та ефективності проведеної оперативного втручання.

VASCULAR ENDOTHELIUM CHANGES UNDER ANTIHYPERTENSIVE TREATMENT

**PhD, associate professor, Kovaleva Y. O., PhD, associate professor, Shelest B. O.,
Martovytsky D. V., Doctor of medical sciences, prof. Shelest O. M.**

Kharkiv National Medical University of the Ministry of Health of Ukraine

Introduction. Hypertension is a risk factor for atherosclerosis, coronary artery disease with the further development of chronic heart failure. This necessitates close attention to the prevention and treatment of cardiovascular disease. In normal conditions the aortic elastic properties smooth the periodic blood flow from the left ventricle and promote the transition to continuous blood flow which provides diastolic blood pressure (DBP). An important factor influencing the level of systolic blood pressure (SBP) and DBP is the elasticity of the vascular wall. The last directly depends on atherosclerotic changes of the arterial wall, the rate and degree of age involution of the structural proteins elastin, fibulin and collagen. Herewith, the damping function of the main vessels disappears, i.e. the process of transformation of a pulsating blood-groove into a continuous blood-groove in a microcirculatory system is broken. This leads to increased postload on the left ventricular myocardium, to its hypertrophy and increase its oxygen needs. Left ventricular remodeling in turn leads to acute complications such as sudden death, myocardial infarction and others. Most patients with hypertension require combined (with more than one medicine) antihypertensive therapy. The current trend of achieving target blood pressure levels uses fixed combinations of antihypertensive drugs. The combination of perindopril and amlodipine leads to inhibition of left ventricular hypertrophy and atherosclerosis of the vascular wall, an additional benefit of such combination is possibility to use it for long-term antihypertensive treatment.

The aim was to evaluate the effect of the combined fixed antihypertensive combination therapy with perindopril and amlodipine on endothelial function and blood pressure.

Materials and methods. The study included 31 patients who were prescribed a fixed combination of perindopril and amlodipine and 32 patients who continued to take unfixed antihypertensive drugs. Endothelium-dependent vasodilation was determined by the Celermajer method.

Results. Treatment with a fixed scheme of antihypertensive drugs as well as therapy with other antihypertensive drugs led to a significant decrease not only in office blood pressure levels, but also in the maximum values of SBP and DBP (152,6±6,4 to 139,8±6,2 and 90,5±2,3 to 85,1±2,4 mm Hg, and in the comparison group from 151,8±6,5 to 139,1±6,1 mm Hg). This decrease also affected the changes in pulse blood pressure. It decreased to a greater extent with a fixed combination of antihypertensive drugs. The heart rate decreased approximately equally in both groups. Analysis of the obtained data revealed that endothelium-dependent vasodilation in patients after 3 months of treatment with a fixed regimen of antihypertensive drugs was significantly lower (8,2±0,4 %) compared with patients in the



control group with intact vessels $10,1 \pm 0,2$ %, $p < 0,05$. In patients prescribed other antihypertensive drugs, vasodilation was determined as $8,7 \pm 0,3$ %, that was significantly higher compared to the first group, $p < 0,1$.

The range of modern antihypertensive drugs with different mechanisms of action allows the general practitioners to determine the optimal approach to the treatment of each patient, taking into account the stages and degrees of hypertension.

Conclusions. The use of a fixed regimen of antihypertensive drugs is one of the most effective methods of improving the control of hypertension.