PECULIARITIES OF COMBINATION OF HYPERTENSION WITH DEFORMING OSTEOARTHRITIS AND OPTIMIZATION OF TREATMENT

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Introduction. Almost 40 out of 100 patients with osteoarthritis have concomitant hypertension. Nonsteroidal anti-inflammatory drugs (NSAIDs) and cyclooxygenase-2 (COX-2) inhibitors can cause increased blood pressure (BP), which is more prominent in patients with established arterial hypertension. NSAIDs and COX-2 inhibitors attenuate the antihypertensive effect of several antihypertensive agents. Frequent BP monitoring is necessary in hypertensive patients who simultaneously receive NSAIDs or COX-2 inhibitors because even small increases in BP may be associated with an important increase in the risk of serious cardiovascular complications. In meta-analyses, a 5-mm Hg increase in systolic blood pressure was associated with a 25% higher risk of cardiovascular events.

Purpose. To determine drug interactions in patients with concomitant hypertension with deforming osteoarthritis.

Materials and methods. In a retrospective study there were 60 patients who regularly took meloxicam at a dose of 7.5 mg/day. The first group consisted of patients who had no cardiovascular pathology in the first group. The second group consisted of patients with hypertension taking antihypertensive drugs. Retrospectively, blood pressure levels measured by the Korotkoff method were analyzed by medical history before and after 3 months of meloxicam administration in both groups.

Results: We evaluated blood pressure parameters in both groups blood pressure in both study groups. In the first group of patients after 3 months of meloxicam administration, 60% of patients had increased blood pressure; in the second group of patients taking the inhibitor angiotensin-converting enzyme inhibitor in combination with thiazide diuretic, after 3 months of meloxicam administration an increase in blood pressure was noted in 64.7% of the group of patients taking β-blocker in combination with thiazide diuretic, after 3 months of meloxicam administration an increase in blood pressure was noted in 64.7%. Kruskal-Wallis analysis of variance for several independent groups was used to compare the values obtained. Statistical differences in blood pressure levels between patient groups were found. Based on the data obtained, in the first group of patients systolic blood pressure increased on average by 7.7±1.2 mm Hg diastolic blood pressure. Blood pressure - by 7.2±0.9 mm Hg. In the second group of patients taking an angiotensin-converting enzyme inhibitor in combination with a thiazide diuretic, systolic blood pressure increased on average by 10.4±1.4 mm Hg by 8.6±0.9 mm Hg. In the second group of patients taking a β-blocker in combination with a thiazide diuretic, systolic blood pressure increased on average by 9.5±0.9 mm Hg, diastolic blood pressure by by 8.5±1.3 mm Hg. The increased blood pressure in both groups was interpreted to be due to meloxicam administration, requiring its replacement with a drug with a greater cardiovascular safety profile (celecoxib).

Conclusion. Prolonged use of melecoxicam resulted in increased blood pressure levels in both patients without identified cardiovascular disease and in patients with arterial hypertension, who regularly take antihypertensive medications with achieved target BP levels, have an average cumulative cardiovascular risk. In these cases, preference should be given to drugs that have the least effect on blood pressure, such as naproxen and celecoxib (in the absence of CHD).