**Summary**

**Objective**

To compare three regimen of long-term combined antihypertensive therapy in order to reach target levels of blood pressure (BP), dynamics of daily BP profile and metabolic parameters in patients with arterial hypertension (AH) associated with diabetes mellitus, type 2 (DM-2).

**Materials and methods**

69 patients with the combination of AH and DM-2 completed the treatment course (male/female 22/47; averageage 57,1±6,5 years). Target BP <130/80 mm Hg. in the group №1 (n=22) was achieved using the combination of per-indopril arginine, indapamide retard and amlodipine, in the group №2 (n=25) it was reached with the combination of valsartan, indapamide retard and amlodipine, and in the group №3 (n=22) – using the combination of amlodip-ine, indapamide retard and metoprolol succinate. Body weight and the levels of office BP, 24 hour ambulatory BP monitoring, parameters of lipid and carbohydrate metabolism were measured before prescription of drugs and 30-32 weeks after and HOMA index was quantified.

**Results**

The degree of office BP levels reduction didn’t differ in all three groups of patients. Values of systolic BP (SBP) and diastolic BP (DBP) “load” for 24 were higher in the patients of the group №3 comparing with the group №1, and achieved levels of night SBP were higher than in the group №1 and the group №2. The treatment based on perindopril arginine and amlodipine and not the combination of valsartan and amlodipine led to decrease of bodyweight and HbA1c serum levels. Patients of groups №1 and 2 were united into one common group of therapy basedon renin-angiotensin-aldosterone system (RAAS) blockers, and after the treatment increased levels of high density lipids cholesterol (HDL cholesterol) levels (from 1,29±0,2 to 1,45±0,3 mmol/L, p=0,006) and improved glycemiccontrol (expressed as HbA1c levels reduction from 8,1±2,2% to 7,0±2,3% (р=0,01)) were detected, and it was present in case of unchanged glucose-lowering therapy and was realized in case of three-component regimen (afteraddition of amlodipine). Combination of metoprolol succinate, indapamide retard and amlodipine was consideredas metabolically neutral in patients with DM-2.

**Conclusion**

Although all three antihypertensive therapy regimens allow to reach target BP levels in the majority of patientswith AH+DM-2, the value of night AH correction and metabolic effects of this therapy re not equal.

**Key words**

Arterial hypertension, diabetes mellitus, combined therapy, circadian rhythm, metabolic effects.