Different reports have been prove the fact that even insignificant increase of blood pressure may favor the development of cardiovascular pathology in patients with diabetes mellitus type 2 (T2DM). The influence of increased level of proinflammatory adipokine resistin to development arterial hypertension (AH) in patients with T2DM remains understudied.

The aim of the research was to evaluate the relationship between the state of resistin activity and hemodynamic indexes in patients with T2DM associated with AH.

Methods. 76 patients with T2DM were randomized into 2 groups: 1st group (34 patients) – T2DM with AH, 2nd group (42 patients) – T2DM without AH. The following data were analyzed: systolic blood pressure (SBP), diastolic blood pressure (DBP), average hemodynamic blood pressure (AHBP). The level of resistin determined by immune-enzyme assay.

Results. The level of SBP was 164.86 ± 2.17 mmHg, DBP – 99.78 ± 1.54 mmHg, AHBP – 108.61 ± 1.07 mmHg in 1st group. The level of SBP was 122.27 ± 1.17 mm Hg, DBP – 78.46 ± 0.82 mmHg, AHBP – 93.61 ± 0.74 mmHg in 2nd group. The levels of resistin were 18.26 ± 0.19 ng/ml in 1st group and 10.42 ± 0.27 ng/ml in 2nd group. We have identified a correlation between AHBP and the resistin activity in 1st group (R=0.42 (p<0.05)). Such association was not revealed in the 2nd group. We have not identified other correlations between the studied parameters.

Conclusions: Revealed a significant relationship between the expression of resistin and increased AHBP indicates important pathogenetic role of resistin activity in the development of AH in patients with T2DM. Widespread AH, its frequent combination with T2DM and severe incapacitating consequences of such a tandem point to further explore the relevance of this issue.