

THE LEVEL OF VISFATIN AND INDICATORS OF CARBOHYDRATE
AND LIPID METABOLISM IN POSTMENOPAUSAL WOMEN WITH THE
COMBINED PATHOLOGY OF TYPE 2 DIABETES AND OSTEOARTHRITIS

Purpose: to determine the interdependence of indicators of glucose metabolism and lipid metabolism with levels of visfatin (VF) in women with T2DM and OA in pre- and postmenopause.

Methods: to conduct the study, we selected a group of 120 pre- and postmenopausal women, who were divided into three groups: 1st (n=20) – women with a moncourse of T2DM; 2nd (n=20) – with a moncourse of OA; 3rd (n=64) – with comorbid course of T2DM and OA. The control group consisted of 16 relatively healthy women of the appropriate age. In order to determine the level of VF blood, a variant of indirect non-competitive heterogeneous enzyme immunoassay was used on the analyzer «Labline-90» (Austria) using a commercial test system manufactured by the company «Elabscience» (China).

The Results: When studying the features of the course of T2DM and OA in pre- and postmenopausal women, violations of carbohydrate and lipid metabolism were recorded due to probable ($p < 0,001$) increase in VF levels in OA ($4,2 \pm 1,1$ ng/ml) and T2DM ($3,9 \pm 1,2$ ng/ml). The highest level of VF was recorded in the group of comorbid combination of T2DM and OA ($5,5 \pm 1,0$ ng/ml) compared to the levels of relatively healthy women of the same age group ($1,8 \pm 0,5$ ng/ml). Thus, a violation of carbohydrate and lipid metabolism in pre and postmenopausal women against the background of hypervisfatinemia in OA and T2DM, especially in their comorbid combination compared to a control group of relatively healthy women of the same age, was reliably established.

Conclusions: The highest level of VF was recorded in the group of comorbid pathology of T2DM and OA. The results obtained by the study are fully confirmed by other studies, which indicate a rather close relationship between insulin resistance and T2DM due to VF and the development of OA.