

# THE INFLUENCE OF LIRAGLUTIDE ON THE LEVEL OF BLOOD PRESSURE IN PATIENTS WITH ARTERIAL HYPERTENSION AGAINST THE BACKGROUND OF OBESITY AND TYPE 2 DIABETES MELLITUS

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**Purpose:** to assess the effect of liraglutide (L) on the level of blood pressure (BP) in patients with arterial hypertension (AH) and obesity against the background of type 2 diabetes mellitus (T2DM).

**Methods.** A total of 55 patients with stage II AH and concomitant non-severe T2DM were examined (fasting plasma glucose  $<12$  mmol/L, glycosylated hemoglobin (HbA1c) -  $8.75 \pm 1.4\%$ , disease duration  $6.4 \pm 1.8$  years, mean age  $51.4 \pm 2.7$ , BMI  $35.2 \pm 2.6$  kg/m<sup>2</sup>, mean BP  $165/103 \pm 3.4/2.2$  mm Hg). Patients were distributed into 2 groups: the comparison group consisted of 22 patients who received metformin 850 mg 2/day, lisinopril 10 mg 1/day and amlodipine 10 mg 1/day. Patients of the main group (L-group, n = 23), received liraglutide 1.8 mg in addition to similar therapy.

**Results.** 6 months after the initiation of therapy, the following results were obtained: HbA1C in the L group was  $6.35 \pm 0.5\%$ , and in the comparison group -  $7.78 \pm 0.45\%$  ( $p < 0.05$ ). BMI in the L-group was  $30.28 \pm 1.1$  kg/m<sup>2</sup>, and in the comparison group -  $32.5 \pm 1.2$  kg/m<sup>2</sup>. Systolic blood pressure (SBP) in the L-group was  $132 \pm 8.23$  mm Hg., and in the comparison group -  $143.5 \pm 10.15$  mm Hg.,  $p < 0.05$  of difference between groups. The diastolic blood pressure (DBP) in the L- group was  $84.5 \pm 3.7$  mm Hg, and in the comparison group -  $89 \pm 5.5$  mm Hg, significant differences were not identified.

**Conclusions:** A significant decrease in SBP during treatment with liraglutide in patients with hypertension against the background of obesity and type 2 diabetes can be due to both significant loss of body weight and an improvement of metabolic control. The obtained data suggest that liraglutide has a potential to reduce cardiovascular risk in hypertensive patients with obesity and diabetes.