

## Education, Research, and Quality Improvement

**SESSION TITLE:** Education, Research, and Quality Improvement Posters

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### THE EFFECT OF NUTRITIONAL STATUS ON THE DEGREE OF ARTERIAL HYPERTENSION

OLHA BOIKO AND VIKTORIIA RODIONOVA

**PURPOSE:** To determine the relationship between the degree of blood pressure and nutritional status in patients with hypertension.

**METHODS:** We examined 33 men with hypertension stage II. Exclusion criteria were diabetes, kidney disease and cancer. Patients were divided into two groups: group I - patients with BMI <25kg/m (n=15), average age -55 (7.4) years, group II - patients with BMI =25kg/m (n=18), average age -56 (6.2) years. (p=0,1) All patients underwent a general clinical examination, measuring nutritional status using anthropometry and bio impedance by an Omrom analyzer. "Statistica10.0" program was used.

**RESULTS:** In group I: systolic blood pressure was 138 (111; 150) mm Hg, diastolic blood pressure - 91 (83; 96) mm Hg., fat tissue was 30.1 (25.1; 40.5), muscle tissue - 29.7 (25.4; 34.2) %. In group II: SBP was 145 (129; 151) mm Hg (p=0,04), DBP - 96 (88; 100) mm Hg. (p=0,049), fat tissue was 35.2 (27.1; 41.4)% (p=0,03), muscle tissue - 27.7 (24.3; 32.1) % (p=0,1). A positive medium correlation was found between systolic blood pressure and fat tissue in group II (R = 0.45) (p <0.05)

**CONCLUSIONS:** In patients with arterial hypertension and a body mass index above 25, an increase in fat mass is observed. Also in this group of patients, the level of blood pressure increases with an increase in adipose tissue.

**CLINICAL IMPLICATIONS:** Hypertension is one of the leading causes of death in the world. Adipose tissue is considered as an active endocrine organ that synthesizes a large number of hormones and neurotransmitters that activate systemic inflammation, hypoxia, contribute to the development of oxidative stress, atherogenesis, and a more severe course of hypertension.

**DISCLOSURES:** No relevant relationships by Olha Boiko, source=Web Response

No relevant relationships by Viktoriia Rodionova, source=Web Response

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