

## GLUCOSE TOLERANCE AND HYPERTENSION

**TOG'AYDULLAYEVA DILDORA DILMURODOVNA**

Assistant of the Department of Fundamental Medical Sciences Asian International University, Bukhara, Uzbekistan

### Abstract:

In this article, the level of glucose tolerance in patients with arterial hypertension is statistically studied and an investigation is conducted among a certain population. In addition, the occurrence of diseases depends on the patient's age, gender, bad habits, and concomitant diseases it is emphasized that it depends on several factors. Relationship of arterial hypertension with different phases of glycemic curve disorder.

**Keywords:** *hypertension, tolerance, glucose, glycemic curve, hyperglycemia, risk factor.*

### Introduction

Hypertension is a disease caused by a violation of the nervous-functional activity of blood vessels. The disease occurs mainly in people older than 40 years, but in recent years it is also observed more often in young people. Both men and women suffer from this pain. Hypertension is one of the main causes of death of people with diseases of the cardiovascular system.

Modern medicine distinguishes 3 stages of arterial hypertension:

Stage 1 — Blood pressure is in the range of 140-159 / 90-99 mm Hg. Blood pressure can periodically return to normal and rise again;

Stage 2 — Blood pressure is in the range of 160-179 / 100-109 mm Hg. Arterial blood pressure often rises and rarely falls to normal.

3rd stage — pressure 180/110 mm wire. rises above. The pressure is constantly high, and its decrease is caused by heart diseases.

Arterial hypertension is a strong and variable risk factor for the development of macrovascular and microvascular complications of diabetes. Patients with diabetes mellitus belong to the group with a high and very high risk of developing cardiovascular complications and chronic kidney diseases. The combination of type 2 diabetes and hypertension dramatically increases the risk of developing terminal stages of microvascular and macrovascular diabetic complications: blindness, end-stage

chronic kidney disease, amputation of legs, myocardial infarction, cerebrovascular accidents, worsens the prognosis and quality of life of patients.

**Materials and methods of the research:** The research work was carried out in the 23rd family polyclinic of Kogon district. A total of 110 patients with arterial hypertension were examined. Normal AD is systolic arterial pressure (SAB)  $\leq 139$ ; diastolic arterial pressure (DAB)  $\leq 89$ ; arterial hypertension (AG) - SAB  $\geq 140$ ; DAB was taken as  $\geq 90$ . Glucose tolerance status was assessed based on postprandial glycemia after 75g of glucose, and standard glucose tolerance test after 1 and 2 hours. The examination is carried out in two stages. Stage 1: the level of glucose tolerance is determined only in patients with hypertension. In the second stage, the level of glucose tolerance was determined in patients with harmful habits (smoking, drinking, etc.) and hypertension.

**Results of the study:** According to the results of the received data, AG was found in 13.2% of normal hyperglycemia. In hyperglycemia after fasting and 2 hours after glucose load, AG was found in almost 20% of patients and was found to be 2.4 times more than in patients with normal glucose tolerance. 3 hours after glucose loading, AG was found in 34.6%, and hyperglycemia was observed 3 times more often than in patients without hyperglycemia. AG was found most often in patients with QD in 58.7% of cases. A strong increase in diastolic pressure 2 hours after a glucose load, and an increase in systolic pressure during glycemia at lunch is characteristic. In patients with harmful habits (smoking), it was found that the results were 24.8% higher than the above values. After 3 hours of glucose load, the results did not differ from the results after 2 hours, that is, a strong increase in diastolic pressure, and in glycemia at dinner, systolic an increase in pressure is characteristic.

**Conclusion:** Thus, the occurrence of impaired glucose tolerance among patients with arterial hypertension is associated with different categories of AG. In this case, the level of systolic and diastolic arterial pressure is to a certain extent related to the violation of various phases of the glycemic curve. When arterial hypertension and harmful habits come together, as the systolic and diastolic parameters of AD increase, the frequency of glucose tolerance also increases. An increase in the amount of glucose load causes an increase in systolic and diastolic pressure. After the load test, the readings between the 1st hour and the 2nd hour increase, but the changes in the 2nd and 3rd hours were almost unchanged.

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