

## METABOLIC DISEASES AND HYPERTENSION: ANALYZING PATIENTS AND EXPLORING THEIR PROSPECTS

**Tilavova Feruza Sobirovna**

*BukharaStateMedicalInstitute,Uzbekistan*

### **Abstract**

Hypertension (HT) is one of the most widespread and serious health problems globally, characterized by a persistent increase in blood pressure. In recent decades, there has been growing attention to the impact of metabolic diseases on the course and prognosis of hypertension. Metabolic abnormalities such as dyslipidemia, carbohydrate metabolism disorders, and obesity often accompany hypertension, increasing the risk of cardiovascular complications.

The aim of this review is to systematize current knowledge regarding metabolic diseases in patients with hypertension, analyze their mutual underlying mechanisms, and discuss promising research directions in this area. The research methods include an analysis of recent scientific publications and review articles available in medical databases.

The results of the analysis emphasize the importance of early detection and effective management of metabolic diseases in patients with hypertension. Dyslipidemia, insulin resistance, and obesity significantly impact the course of hypertension and increase the risk of cardiovascular complications. Particular attention is given to the interrelated mechanisms between these conditions, which is crucial for developing personalized approaches to treatment and prevention.

In conclusion, the need for further research focused on developing new methods for diagnosing, preventing, and treating metabolic diseases in patients with hypertension is highlighted. Optimizing the management of metabolic factors can significantly reduce the burden of disease and improve the prognosis for patients suffering from hypertension and accompanying metabolic disorders.

**Keywords:** *hypertension, metabolic diseases, dyslipidemia, carbohydrate metabolism, obesity, cardiovascular complications.*

## RELEVANCE

### Hypertension and Metabolic Disorders: Analysis and Treatment Prospects

Hypertension is one of the most prevalent chronic diseases, characterized by persistent elevation of blood pressure (BP). In the modern world, hypertension affects a significant number of people and remains a key risk factor for the development of cardiovascular diseases. According to the World Health Organization, more than 1.3 billion people suffer from hypertension, making it a global health problem. Hypertension is often accompanied by metabolic disorders such as dyslipidemia, insulin resistance, and obesity, which exacerbate the patients' condition and increase the risk of complications.

Metabolic disorders are quite common among patients with hypertension. Studies show that 40-60% of hypertensive patients exhibit signs of metabolic syndrome, which includes abdominal obesity, insulin resistance, dyslipidemia, and hyperglycemia. These factors heighten the risk of progression of cardiovascular diseases. The combination of hypertension and metabolic disorders significantly increases the likelihood of developing ischemic heart disease, myocardial infarction, and stroke.

Research has demonstrated that patients with hypertension and metabolic syndrome have a severalfold increased risk of cardiovascular events compared to patients with hypertension alone. For instance, the SPRINT (Systolic Blood Pressure Intervention Trial) study indicated that more intensive lowering of systolic blood pressure to levels below 120 mm Hg could significantly reduce the risk of cardiovascular events and mortality.

Modern approaches to the treatment of hypertension and metabolic disorders involve both pharmacological therapy and lifestyle modifications. The use of angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor antagonists not only helps effectively control blood pressure but also positively impacts the patient's metabolic profile.

Dietary correction, increased physical activity, and stress management are also key aspects of treatment. Regular physical activity of at least 150 minutes of moderate exercise per week is recommended. Monitoring blood pressure, lipid levels, and blood glucose is essential for the timely identification and correction of metabolic disorders.

A comprehensive approach to the diagnosis and treatment of hypertension and metabolic disorders can significantly improve patient outcomes and reduce the risk of serious cardiovascular diseases.