

## IDENTIFICATION OF EARLY MARKERS OF NAFLD DEVELOPMENT IN YOUNG PEOPLE OF THE UZBEK POPULATION, OPTIMAL TREATMENT AND PREVENTION REGIMENS

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**Abstract:** Non-alcoholic fatty liver disease (NAFLD) is emerging as a major health concern worldwide, affecting individuals of various age groups and ethnicities. This scientific article focuses on the identification of early markers of NAFLD development in young people within the Uzbek population, along with exploring optimal treatment and prevention regimens. Through a comprehensive review of current research, clinical studies, and epidemiological data, this article aims to contribute to the understanding and management of NAFLD in the context of Uzbekistan. Key findings emphasize the significance of early detection, personalized treatment approaches, and lifestyle interventions to mitigate the progression of NAFLD in young individuals.

**Keywords:** NAFLD, Non-alcoholic fatty liver disease, early markers, young people, Uzbek population, optimal treatment, prevention regimens.

**Introduction:** Non-alcoholic fatty liver disease (NAFLD) is a multifaceted hepatic disorder characterized by the accumulation of fat in the liver, unrelated to excessive alcohol consumption. This condition encompasses a spectrum of liver abnormalities ranging from simple steatosis to non-alcoholic steatohepatitis (NASH) and, in severe cases, cirrhosis and hepatocellular carcinoma. NAFLD is closely associated with metabolic syndrome, obesity, insulin resistance, and other cardiovascular risk factors, making it a significant public health challenge.

While the global prevalence of NAFLD is on the rise, the burden of the disease varies across different populations. The young population in Uzbekistan is not exempt from this trend, necessitating a focused investigation into early markers of NAFLD development specific to this demographic. Early identification is crucial for implementing effective intervention strategies that can prevent or delay disease progression.

This scientific article reviews the current state of knowledge regarding early markers of NAFLD in young individuals of the Uzbek population. Genetic predisposition, lifestyle factors, and metabolic parameters will be explored as potential indicators of susceptibility to NAFLD. Additionally, we will discuss the

optimal treatment modalities and prevention regimens tailored to the unique characteristics of the Uzbek population.

The pathogenesis of NAFLD involves a complex interplay of genetic, environmental, and lifestyle factors. Several studies suggest a genetic component to NAFLD development, and ongoing research aims to identify specific genetic markers associated with increased susceptibility. Furthermore, lifestyle factors such as diet, physical activity, and sedentary behavior play a crucial role in the development and progression of NAFLD. Cultural and regional variations in dietary habits and lifestyle practices among the Uzbek population may contribute to unique risk profiles, emphasizing the need for population-specific studies.

Understanding the early markers of NAFLD in the young Uzbek population is essential for the development of targeted screening programs. Early detection allows for timely intervention, potentially preventing or mitigating the progression of NAFLD. Personalized treatment approaches, including pharmacological interventions and lifestyle modifications, will be discussed based on the latest evidence.

Prevention strategies are equally important in managing NAFLD in young individuals. Public health initiatives should aim to raise awareness about the risks associated with sedentary lifestyles, unhealthy dietary patterns, and excessive calorie intake. Tailored educational programs and interventions promoting physical activity and a balanced diet can contribute significantly to NAFLD prevention in the Uzbek youth.

In conclusion, this scientific article provides a comprehensive overview of the identification of early markers of NAFLD development in young people within the Uzbek population. The insights gained from this research can inform targeted screening programs, personalized treatment approaches, and effective prevention strategies. By addressing the unique genetic, lifestyle, and cultural factors associated with NAFLD in Uzbekistan, healthcare professionals can contribute to the reduction of NAFLD burden in the young population.

#### **REFERENCES:**

1. Younossi ZM, Koenig AB, Abdelatif D, Fazel Y, Henry L, Wymer M. Global epidemiology of nonalcoholic fatty liver disease-Meta-analytic assessment of prevalence, incidence, and outcomes. *Hepatology*. 2016;64(1):73-84.
2. Chalasani N, Younossi Z, Lavine JE, et al. The diagnosis and management of nonalcoholic fatty liver disease: Practice guidance from the American Association for the Study of Liver Diseases. *Hepatology*. 2018;67(1):328-357.

3. Eslam M, Sanyal AJ, George J; International Consensus Panel. MAFLD: A Consensus-Driven Proposed Nomenclature for Metabolic Associated Fatty Liver Disease. *Gastroenterology*. 2020;158(7):1999-2014.e1.
4. Musso G, Gambino R, Cassader M, Pagano G. Meta-analysis: Natural history of non-alcoholic fatty liver disease (NAFLD) and diagnostic accuracy of non-invasive tests for liver disease severity. *Ann Med*. 2011;43(8):617-649.
5. Stärkel P, Schnabl B. Bidirectional Communication between Liver and Gut during Alcoholic Liver Disease. *Semin Liver Dis*. 2016;36(4):331-339.
6. Younossi Z, Tacke F, Arrese M, et al. Global perspectives on nonalcoholic fatty liver disease and nonalcoholic steatohepatitis. *Hepatology*. 2019;69(6):2672-2682.