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CLINICAL EFFECTIVENESS OF DIET THERAPY IN CHRONIC HEPATITIS

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Abstract

This study provides a comprehensive evaluation of the clinical effectiveness of diet therapy in patients with chronic hepatitis based on contemporary scientific evidence. The findings indicate that dietary interventions are associated with a 20–35% reduction in liver enzymes (ALT, AST), decreased hepatic steatosis, and improvement in fibrosis indices. Caloric restriction of 7–10% contributes to the regression of liver fat accumulation, while low-carbohydrate diets significantly improve insulin resistance. The results demonstrate that diet therapy has not only symptomatic but also pathogenetic significance. Modern approaches highlight that the combination of diet therapy with pharmacological treatment leads to optimal clinical outcomes. Therefore, diet therapy should be considered a primary, modifiable, and cost-effective strategy in the management and prevention of chronic hepatitis.

Keywords: Chronic hepatitis, diet therapy, liver enzymes, ALT, AST, steatosis, fibrosis, insulin resistance, metabolic syndrome, low-carbohydrate diet, Mediterranean diet, prevention.

Introduction

Chronic hepatitis (CH) represents a significant epidemiological challenge in the global healthcare system, with its development influenced by a complex interplay of metabolic, viral, and socio-hygienic factors. In recent years, diet therapy has

been increasingly recognized as an essential component in the comprehensive management of patients with CH.

Chronic hepatitis is defined as an inflammatory process in the liver persisting for at least six months and may have viral (B, C, D), toxic, autoimmune, or metabolic etiology. According to the World Health Organization, more than 300 million people worldwide are living with chronic viral hepatitis B and C, and approximately 1.1 million deaths annually are associated with liver cirrhosis and hepatocellular carcinoma.

Traditional treatment approaches include antiviral agents and symptomatic therapy. However, the growing recognition of metabolic factors has elevated the importance of diet therapy. This is particularly evident in cases of chronic hepatitis associated with non-alcoholic fatty liver disease (NAFLD), where nutrition is considered a key modifiable factor.

Main part. Evidence from clinical studies demonstrates that diet therapy exerts a measurable impact on biochemical, metabolic, and structural liver parameters.

Regarding liver enzymes and inflammation, patients adhering to the Mediterranean diet have shown a reduction in ALT and AST levels by approximately 20–35%. This effect is attributed to the anti-inflammatory properties of antioxidants (vitamin E, polyphenols) and omega-3 fatty acids.

In terms of fibrosis and steatosis, caloric restriction of 7–10% in patients with hepatic steatosis has been associated with up to a 30% reduction in liver fat content. Fibrosis indices, including FIB-4, have demonstrated significant improvement.

Concerning insulin resistance, low-carbohydrate diets have been shown to improve HOMA-IR values by 15–25%, contributing to restoration of hepatic metabolic function.

With respect to body weight and BMI, clinical observations indicate that a weight reduction of 5–10% slows disease progression and improves liver function.

Conversely, unhealthy dietary patterns—particularly those rich in trans fats, fructose-containing beverages, and high-calorie intake—exacerbate hepatic inflammation and accelerate fibrosis progression.

The obtained results suggest that diet therapy has not only symptomatic but also pathogenetic significance. Metabolic imbalance plays a central role in liver disease, and nutritional interventions allow modulation of these underlying mechanisms.

While traditional approaches considered diet therapy as an adjunct, contemporary research supports its role as a core therapeutic component. In particular, in combined cases of NAFLD and viral hepatitis, diet therapy enhances the effectiveness of pharmacological treatment.

Conclusion. Diet therapy in patients with chronic hepatitis is a clinically effective and scientifically grounded component of treatment.

A balanced diet rich in antioxidants significantly reduces liver enzyme levels and suppresses inflammatory processes. Caloric restriction and weight control slow the progression of hepatic steatosis and fibrosis. Low-carbohydrate diets and those rich in healthy fats improve insulin resistance and metabolic status.

When combined with pharmacotherapy, diet therapy yields optimal clinical outcomes. Therefore, diet therapy should be considered a primary, modifiable, and cost-effective strategy in the treatment and prevention of chronic hepatitis.

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