

**LABORATORY INDICATIONS FOR AUTOIMMUNE HEPATITIS WITH
CHRONIC LIVER DISEASE**

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Abstract: Autoimmune hepatitis (AIH) is a chronic and ongoing liver inflammatory disease characterized by increased aminotransferases and levels of immunoglobulin G (IgG), the presence of autoantibodies. AIH occurs in people of all ages. The prevalence of AIH varies significantly between geographic areas and ethnic groups. Due to the lack of specific diagnostic signs in AIH patients, many patients may experience significant fibrosis or even cirrhosis when the disease is detected at an early stage.

Keywords: autoimmune hepatitis, autoimmune hepatitis liver cirrhosis.

Acute-Onset Autoimmune Hepatitis (AIH) – Autoimmune hepatitis (AIH) is a chronic liver disease of unknown etiology, and its clinical presentations can vary. Most patients present with elevated liver enzymes or without symptoms, beginning the disease in a chronic form. However, in some patients, this condition can manifest as acute hepatitis, fulminant liver failure, chronic hepatitis, or cirrhosis. Jaundice is observed in 10-15% of patients, and a subset of these patients may progress to fulminant or subacute liver failure. This disease is poorly described in the medical literature and may present diagnostic challenges for physicians, as it can resemble other liver diseases and rapidly progress to fulminant liver failure. Additionally, international AIH groups and simplified criteria have limited effectiveness in identifying patients in this small group.

Autoimmune hepatitis has a variety of clinical phenotypes. This diversity complicates its diagnosis and management. Autoimmune hepatitis is a chronic inflammatory liver disease and diagnosis that occurs mainly in women and involves patients of both sexes and different ethnic groups. Patients may have acute, acute severe (fulminant) or asymptomatic presentations.

Some researchers have speculated that acute-onset AIH may spontaneously worsen into a previous form of chronic AIH. Acute-onset AIH can occur at any age, but it is more common among children and adolescents. Among younger patients, fulminant liver failure is more frequently observed. Tokumoto and colleagues categorized acute-onset AIH into two distinct types based on clinical and histological features: one as an acute exacerbation of chronic hepatitis, and the other as AIH that was not preceded by chronic hepatitis but presented with acute symptoms.

Elevated serum aminotransferases and classic histological features are observed in all forms of AIH. The greatest challenge in effectively treating acute-onset AIH is making an accurate diagnosis and distinguishing the disease from other acute liver conditions. The aim of this study is to analyze the clinical features, treatment responses, and outcomes of patients with acute-onset AIH.

Materials and Methods: This retrospective, multi-center study included patients diagnosed with AIH from 2022 at three medical centers in Tashkent medical academy. There were no specific guidelines or consensus for diagnosing acute-onset AIH, so the diagnosis was reviewed based on the national scoring system for AIH [4]. Only patients who responded to steroids (AIH score >15) or those with probable AIH (score 11-15) were included.

Results: A total of 20 patients were diagnosed with acute-onset AIH during the study. The mean age was 40 years, with women being more affected than men (2:1). The most common symptoms were jaundice (78%), fatigue (32%), pruritus (26%), and abdominal pain (17%). Positive ANA, ASMA, and elevated IgG were observed in 53%, 48%, and 67% of patients, respectively. All patients had elevated transaminases, 35% had an elevated INR, and all patients had normal kidney function. Liver biopsy was performed in all patients, and liver damage was found in 56% of cases, with 22,4% showing liver fibrosis. After an average follow-up of 6 months, 54.6% of patients had a complete response and 9,3% had a partial response. Only two patients required a liver transplant, and six patients (1%) died.

Conclusion: Acute-onset AIH is a condition that requires early diagnosis and appropriate treatment. This study describes the clinical, biochemical, and histological characteristics of the disease. Positive ANA, ASMA, elevated IgG, and increased transaminase levels are characteristic features of AIH; however, the absence of these parameters does not completely exclude the diagnosis. The widespread occurrence of liver fibrosis in patients and the high long-term mortality risk, especially in cases related to cirrhosis, are significant findings.

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