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# Clinical-Laboratory Markers of Chronic Viral Hepatitis C

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**Abstract:** This article describes the prevalence and clinical features of 105 patients with chronic hepatitis. It was found that patients with chronic viral hepatitis have a high frequency of subjective or objective signs in the clinical picture and increased liver cytolysis according to laboratory tests.

**Key words**: chronic hepatitis, liver, virus, subjective sign, objective sign

The purpose of the study. Clinical and laboratory markers in patients with chronic viral hepatitis - assessment of liver function by determining biochemical parameters

**Materials and methods of research**. During the study, data were obtained based on the results of a clinical and laboratory examination of 105 patients diagnosed with chronic viral hepatitis. 67 (63.8%) of the patients were women and 38 (36.1%) were men, their age ranged from 20 to 75 years (on average 44.2±3.2 years). During the survey, a comparative assessment of the health status of 60 healthy people aged 20-65 years was carried out.

**Results and analysis**. As a result of the study, it was found that patients with chronic viral hepatitis have a high frequency of subjective or objective signs in the clinical picture and increased liver cytolysis according to laboratory tests.

**Conclusion**. It has been established that chronic hepatitis occurs in the absence of subjective or objective signs from the clinical picture, from laboratory tests - indicators of liver cytolysis, elevated ALT values, total bilirubin, pigment caustic substances.

**Keywords:** Chronic hepatitis, liver, virus, subjective sign, objective sign.

**Introduction: Relevance and importance of the topic**. Viral hepatitis C is one of the main causes of chronic liver diseases, and it is not only a medical, but also a socio-medical problem due to its widespread distribution throughout the world, mainly observed when the population is incapacitated, severe complications and transition to the chronic stage [1,3,4,5].

Chronic viral hepatitis C is characterized by rapid progression to fibrosis and, after 20–30 years, 20–45% of cases progress to cirrhosis and 5–15% to hepatocellular carcinoma. Chronic viral hepatitis C is often asymptomatic, and laboratory tests are also borderline [2,5,10,11].

Today, a number of scientific studies are being conducted around the world to study the clinical and laboratory basis of chronic viral hepatitis, to prevent its complications through early diagnosis of the disease and the development of treatment methods. However, the number of studies that would allow us to confirm this idea is extremely small, and the data in them are not reliable.Based on these considerations, the aim of our work is to assess liver function in patients with chronic viral hepatitis by determining clinical and laboratory markers and biochemical parameters.

## METHODS

The study included data on the results of clinical, laboratory and instrumental examinations of 105 patients diagnosed with chron

ic viral hepatitis. 67 (63.8%) of the patients were female, 38 (36.1%) were male, and their age ranged from 20 to 75 (mean 44.2±3.2) years. The examination results were assessed using a clinical-reference card (questionnaire).

The study was approved by the ethics committee of the Bukhara Medical Institute. Inclusion criteria: patients aged 20-75 with chronic hepatitis; individuals who provided written consent for clinical, laboratory and instrumental examinations.

Exclusion criteria from the study: alcohol or drug addiction, toxic hepatitis, alcoholic hepatitis, serious diseases (uncontrolled arterial hypertension, type 2 diabetes mellitus in the decompensation stage, chronic heart failure III-IV functional class, patients with myocardial infarction and stroke), pregnant and lactating women.

To rule out alcoholic liver disease, a history (absence of regular alcohol consumption) was collected and screened using a special CAGE questionnaire [4]. During the study, a comparative assessment was performed with 60 healthy subjects (aged 20-65).

In the process of diagnosing patients, anamnesis data were collected, laboratory and ultrasound examinations were used. Abdominal ultrasound examination (assessing the size of the liver and spleen, the condition of the parenchyma, the extrahepatic bile ducts, the vascular pattern of the liver, identifying signs of portal hypertension: the presence of ascites, the diameter of the splenic vein > 10 mm, portal vein > 13 mm, splenomegaly, redrainage of the umbilical vein was determined by parameters and the following signs were noted: liver enlargement, increased echogenicity compared to the spleen, the density of the liver is relatively reduced (hepato-spleen index is less than 1), sound permeability is reduced, visualization of the portal and hepatic veins is worsened. Ultrasound elastography was performed in 105 patients to rule out fibrosis in liver parenchyma.

Biochemical tests of blood: alanine aminotransferase (ALT) and aspartate aminotransferase (AST), γ-glutamyltranspeptidase (GGTP), alkaline phosphatase (IF), total bilirubin, total protein and its fractions, blood clotting system activity were studied.

The obtained data were statistically processed using the Student's t-test, and the difference in results with $P<0.05$ was considered reliable.

**RESULTS**

The ratio of women to men in our study was 1.3:1. The prevalence of chronic viral hepatitis by age is shown in Table 1.

**Table 1.**

**Текширилувчи гурух беморлар тавсифи**

| **Indicators** | | **Main group** n =105 | **Control group** n=60 |
|---|---|---|---|
| Men | N | 38 | 25 |
| | % | 35,8 | 41,6 |
| Woman | N | 67 | 35 |
| | % | 64,1 | 58,3 |
| Average age of patients | | 44,2±3,2 | 44,2±3,2 |

As can be seen from Table 1, when analyzed by gender, the results of the analysis showed that SG is more common in women, and is observed mainly in the working-age population.

To assess the characteristics of clinical manifestations, the first task was to determine the range of leading symptoms that make up the essence of the disease. After that, each clinical and objective sign was analyzed. The frequency and incidence of clinical signs in SG were analyzed in detail.

**Table 2.**

**The rate of meeting subjective and objective symptoms in chronic hepatitis**

| Indicators | Asymptomatic Occurrence | Subjective or objective signs | Occurrence of subjective and objective signs |
|---|---|---|---|
| Asthenovegetative syndrome - weakness, reduced work capacity, sleep disorders, agitation, low mood, headache, weight loss | 30 (28,5%) | 50 (47,6%) | 40 (38%) |
| Dyspeptic syndrome – biliary dyspepsia with a bitter taste in the mouth, nausea, belching, Intestinal dyspepsia – flatulence, persistent diarrhea | 29 (27,6%) | 52 (49,5%) | 24 (22,8%) |
| Pain syndrome - pain under the right rib, a feeling of heaviness | 26 (24,7%) | 54 (51,4%) | 25 (23,8%) |
| Cholestatic syndrome - yellowing of the skin, sclera, mucous membranes | 31 (29,5%) | 52 (49,5%) | 22(23,3%) |

The main set of clinical symptoms characteristic of chronic hepatitis is as follows: weakness, reduced work capacity, sleep disorders, irritability, low mood, headache, weight loss, heaviness and discomfort under the right rib, flatulence, constipation, flatulence, yellowing of the skin and sclera.

As can be seen from the data presented in the table, the frequency of symptoms in CKD varies and depends on the stage of the disease.

It was observed that 25% of patients had no symptoms of asthenovegetative symptoms, 45.8% of patients had only one of the subjective or objective symptoms, and 29% of patients had only one of the subjective or objective symptoms.

Among the dyspeptic symptoms, 50.8% of patients had a full sensation of bitterness in the mouth, nausea, while dyspeptic syndrome was observed in 23.3% of patients, and 25.8% of patients had no symptoms. Pain under the right rib, a feeling of heaviness, subjective and objective signs were found in 49.1% of patients, and objective signs were found separately in 27.5% of patients

Cholestatic syndrome - yellowing of the skin, sclera, mucous membranes was not observed in 28.3% of patients, subjective and objective symptoms were observed in 48.3% of patients, and only one symptom was observed in 23.3% of patients.

**CONCLUSION**

In conclusion, it was found that chronic hepatitis is more common in women than in men. The clinical picture often shows a combination of subjective and objective signs.

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