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## CHRONIC HEPATITIS C WITH CRYOGLOBULINEMIA: FEATURES AND MANIFESTATIONS

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### ABSTRACT

Demographic, clinical, laboratory, epidemiological aspects of cryoglobulinemia in chronic HCV infection in patients of the Crimean population remain insufficiently studied.

To study the incidence of cryoglobulinemia in chronic HCV infection and analyze the features of chronic HCV infection with the presence of cryoglobulinemia in the study population of patients.

**Materials and methods.** A study was conducted on 65 patients with chronic HCV infection (with chronic hepatitis C and liver cirrhosis). All patients underwent blood testing for the presence of cryoglobulins. Standard diagnostic tests included a biochemical blood test with determination of the levels of total bilirubin, ALT, AST, alkaline phosphatase, rheumatoid factor. The stage of liver fibrosis was determined using ultrasound elastography. The diagnosis of liver cirrhosis was established based on the results of a comprehensive clinical, laboratory and instrumental study; scores were calculated on the Model for End-stage Liver Disease scale and the Child-Pugh scale.

**Results and its discussion.** Among 65 patients with chronic HCV infection, 37 % ( $n = 24$ ) had a positive test for the presence of cryoglobulins in the blood. Groups with and without cryoglobulins were comparable in gender ( $p > 0.05$ ), BMI ( $p > 0.05$ ) and duration of infection ( $p > 0.05$ ). In the group with cryoglobulinemia, patients with the syndromes of hepatomegaly ( $p < 0.001$ ), splenomegaly ( $< 0.05$ ), ascites ( $p < 0.05$ ), and there were also lower platelet counts ( $p < 0.001$ ) and higher rates of AST ( $p < 0.01$ ),  $\gamma$ -glutamyl transpeptidase ( $p < 0.01$ ), bilirubin ( $p < 0.05$ ), ESR ( $< 0.01$ ) and rheumatoid factor ( $p < 0.001$ ), which indicates the severity of the disease. A higher incidence of patients with already developed cirrhosis was found in the group of HCV infection with the presence of cryoglobulinemia ( $p < 0.001$ ).

**Conclusions.** The study revealed a high incidence of cryoglobulinemia (37 %) in the study population of patients and showed that chronic HCV infection with the presence of cryoglobulinemia is characterized by polymorphism and severity of clinical manifestations.

**KEYWORDS:** chronic hepatitis C, cryoglobulinemia, extrahepatic diseases

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