GENETIC FEATURES OF THE DEVELOPMENT OF CHRONIC HEPATITIS C

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The problem of the spread and treatment of chronic viral hepatitis C continues to be one of the significant problems of internal medicine. The urgency of the problem of hepatitis C is determined by the high epidemiological and socio-economic significance of this disease, as well as the widespread occurrence, severity of the course and the frequency of development of chronic forms. It is HCV infection that is the main reason for the formation of the entire group of chronic liver diseases - chronic hepatitis, cirrhosis, hepatocarcinoma. At the same time, the study of this issue is not only medical, but also socio-economic in nature. It is believed that chronic hepatitis C is always potentially dangerous, but the pathogenesis of this disease is not fully understood. This will require a search for new approaches and new fundamental research. An active study of the genetic basis of predisposition to various infectious diseases has collected a sufficient amount of information indicating the importance of dysfunction of anti-inflammatory cytokines (TNF-a) and cytotoxic T-lymphocytes (CTLA-4) in the genesis of viral liver diseases. The influence of genetic factors determines the immune status, in this regard, it is the immunogenetic aspects that determine the features of the development and progression of viral hepatitis.

The aim of the study was a comparative analysis of genotypic variants of TNF-α and CTLA-4 genes in patients with chronic hepatitis C and liver cirrhosis and their effect on the course of the disease.

The obtained results showed the existence of a difference in the frequency of occurrence of allelic variants of the studied polymorphisms in patients with favorable and unfavorable course of HCV and varying degrees of activity in the liver of the pathological process caused by infection of viral hepatitis type C. An analysis of the scientific literature on the effect of polymorphism - G308A of the TNF-α promoter region on the development of chronic hepatic pathology shows that most researchers believe that this polymorphism affects the development and course of C-viral hepatitis. The results of our study are consistent with the data of proponents of ideas about the significant pathogenetic role of the TNF-α gene in the course of hepatitis.

The data obtained allow us to conclude that the carriage of the “G” allele and the combination of genotypes A / G + G / G of the –A49G polymorphism of the CTLA-4 gene are associated not only with a decrease in the risk of CVHC development, but also with a lower intensity of inflammation and fibro-formation in the liver and a high probability of favorable course of the disease.