Early Diagnosis and Adequate Treatment of Hepatorrhia in Systemic Lupus Erythematosus

Abstract: This article is dedicated to systemic lupus erythematosus, which is considered one of the urgent and complex problems in rheumatology, and which is observed in various young people and causes early death as a result of serious complications. In its systemic, i.e., serious impact on all organs, serious damage to the liver - later hepatargia (liver death) and its serious consequences remain relevant. In the treatises of the authors devoted to this problem, the main attention is paid to the serious approach to this condition and the emphasis on early diagnosis and adequate treatment. It has been shown that in the prevention of “liver death” of the, only determination of clinical and laboratory indicators and adequate treatment will allow prevention and elimination of negative consequences. It emphasizes and demonstrates the importance of targeted therapy, showing ways to improve quality and length of life. The urgency of the problem is that in most cases it is limited to standard examinations (heart, kidney and other systems). Because it is difficult to say that the study of the metabolic, morpho-functional conditions of the liver is sufficient. Therefore, it is emphasized that it is important to study the morpho-functional state of the liver and to choose an adequate treatment in the case of autoimmune SLE disease. The article is devoted to the current problem, focuses on its early diagnosis and target therapy, and is aimed at carefully examining liver function.

Key words: systemic lupus erythematosus, hepatorrhia, autolysis ("liver death"), early diagnosis, criteria.

Introduction: Systemic lupus erythematosus (SLE) is an autoimmune disease that remains as one of the serious problems in clinical rheumatology. In this case, a complete cascade of autoimmune reactions is manifested in the clinical form. In this situation, it is very important to preserve the structure of organs and systems important for life in the foreground. One such organ is the liver, as it performs about 500 different functions, which is why it is considered the “center of the soul and the core of life”.

Liver cells are involved in all metabolic processes (carbohydrate, fat, protein, water, mineral, pigment, vitamins, hormones), in the synthesis of many substances (cholesterol, fatty acids, proteins, blood
clotting factors, A, D, F, K and B₁₂, folate acid) (Orbai A.L., Alaran G.S., Cardon Cetal, etc.). Liver damage in SLE is usually not a component of the diagnostic approach, but is noted in 60% of patients. Liver pathology ranges from its slight enlargement to severe hepatitis, which is noted in histological examinations of the liver: stagnation of blood in the liver, fatty infiltration and necrosis occur in the portal system. Infarction of the liver, vasculitis and rupture of the liver and manifestation with the clinic of "acute abdomen" are observed relatively less often.

In about 25% of patients with SLE, subclinical liver injury is observed and liver enzyme activation is detected. In this case, a number of authors associate the increase in the amount of transaminases and hepatomegaly in SLE with obesity and the effect of drugs (hepatotoxic drugs). Because liver damage is particularly severe in patients with TCC, most patients require long-term aggressive cytotoxic therapy. The patient's age is also important, if he has concomitant diseases (comorbidity), and the frequency of side effects from the liver increases in older people.

Under the influence of negative factors, destruction of hepatocytes (inflammation, drug overdose, cholestasis) activates fibrogenesis, as a result of which structural changes occur in the liver parenchyma, which is especially observed in older people. The development of fibrogenesis is associated with the duration of autoimmune inflammation caused by the injury factor, which leads to the degradation of the liver parenchyma, which is a collagen-rich tissue that covers the liver parenchyma.

But later, many scientists consider fibrosis not only as a periodically repeated injury-recovery process in the liver tissue, but as a response reaction resulting from the development and replacement of connective tissue in the reparative process. The inflammatory process in the SLE is the development of fibrosis, in which its formation in the SLE continues for months. The liver is an organ with a complex process, and assessing the severity of its damage (decompensation) is not an easy task. For this purpose, it is recommended to determine using different scales and indices later. It takes into account the activity of transaminases, platelet count, prothrombin time, AST/ALT ratio, and indirectly determines the degree of damage to liver hepatocytes.

Assessment of liver fibrosis is common, including acute phase liver tests and liver failure, namely ALT, total bilirubin α-, macroglobulin, apoprotein A, AI and γ-glutamine transferase, as well as the ARPI index (determined by the ratio of AST to the amount of platelets). The results of these tests show a reliable correlation with the clinical stages of fibrosis. 25 patients with SLE are being treated in the rheumatology department of the Tashkent Medical Academy (21 women, 4 men), their average age was 19.2 years. The diagnosis of the disease was based on the international classification criteria (SLICC, 2012), that is, no less than 4 out of 11 criteria were taken into account. Clinical-laboratory tests, biochemical tests and examination methods using special instruments were used in the examination of patients, including ultrasound examination of the liver and gallbladder, total cholesterol and its fractions, ALT, AST, alkaline phosphatase, Ritis coefficient (ALT/AST) ratio, AST the ratio of the upper limit of normal to platelets multiplied by 100 was used. The MS EXSEL SPSS program was used to analyze the obtained results. Student's t-test (R) was used to determine the level of differential reliability, and correlation was analyzed using the correlational method.

Results and their conclusion.

Analyzes and clinical-laboratory and functional indicators of the liver showed that the insufficient activity of the liver in patients with SLE is involved in the autoimmune process and the development of cytolysis of liver cells and a decrease in its synthetic activity. In this case, the signs of activation of fibrogenesis and initial signs of fibrosis were associated with the level of disease activity and expression of the autoimmune process of SLE and polyorgan symptoms (cardiac, kidney, lung, gastrointestinal tract, endocrine glands) in patients with SLE.
In conclusion, it should be noted that monitoring the functional state of the liver in patients with this disease, early detection of autoimmune inflammatory activity and signs of fibrosis, and the complex use of the main target therapy tools for the autoimmune inflammatory process in patients with SLE are not only effective management of SLE disease, but also internal organs, including in this disease progression and autolysis of autoimmune damage to the main metabolic organ, the liver, which is neglected, i.e. (self-mutilation) “death of the liver” - prevents hepatorrhia.

References

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