Zhuravlyova A., Ognieva O.

NONINVASIVE DIAGNOSIS OF LIVER FIBROSIS IN PATIENTS WITH CHRONIC LIVER DISEASE

Kharkiv National Medical University (Department of Internal Medicine№3) Kharkiv, Ukraine

Introduction: liver fibrosis is known to be a pathological process that is considered to be consequence of a lot of liver insults that causes chronic liver injury. Hepatic fibrosis can occur in response to viral, immune, and toxic-metabolic insults and consists of an accumulation of fibrillar extracellular matrix (ECM) components. It is mostly considered to be irreversible because it is just like a silent killer as it doesn't show any particular signs and symptoms. But early diagnosis could be helpful as in early stages it is somehow reversible and doesn't progress to serious liver involvement.

Aim: to estimate the usage of non-invasive diagnostic tests in patients with chronic liver diseases for finding early morphological changes in liver.

Materials and Methods: different non-invasive methods were studied to access their ability to estimate the degree of liver damage due to fibrosis.

Discussion:novel technologies such as transient hepatic elastography and magnetic resonance imaging (MRI) elastography show promise as noninvasive methods of testing for hepatic fibrosis but they have small value in identifying early stages of fibrosis and low-grade inflammation. Separate investigation of direct and indirect serum markers of synthesis and degradation of ECM do not correspond to the exact organ or stage of the process. Combination of these serum markers is used to access the liver function and the rate of inflammation in the way of different panels interpreted with scoring systems.Fibrotest is used for quantative and qualitive diagnosis of liver fibrosis and Aktitest to assess the necroinflammatory activity, and the panel FibroMaks in addition includes diagnostic algorithms Steatotest to determine the stage of steatosis, Ashtest to determine the degree of activity of alcoholic steatohepatitis and Nashtest to

evaluate the stage of nonalcohol steatohepatitis in patients with metabolic syndrome. These methods have high specificity and sensitivity if compare results to liver biopsy, but still cannot replace this procedure which is considered to be a «gold standard».

Conclusions: in cases when liver biopsy cannot be performed or there is need in early diagnosis of morphological liver changes doctors may use new non-invasive techniques that are quite reliable and relevant for the liver disease diagnosis.