NON-INVASIVE EVALUATION OF LIVER FIBROSIS IN CHRONIC HEPATITIS C

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NON-INVASIVE EVALUATION OF LIVER FIBROSIS IN CHRONIC HEPATITIS C (Abstract): Chronic hepatitis C (CHC) is a major public health concern, with around 180 million individuals affected worldwide. Liver fibrosis and its end-point cirrhosis are the main causes of morbidity and mortality in patients with CHC. Liver biopsy (LB) has traditionally been considered the „gold standard” for pre-treatment evaluation of liver fibrosis in patients with CHC. However, LB is an invasive procedure with several shortcomings (intra- and interobserver variability, sampling errors, expensive) and the risk of rare but potentially life-threatening complications (biliary peritonitis, hemo-peritoneum, and death in 1/10,000). The aforementioned shortcomings of LB have led to development of several non-invasive methods for the assessment of liver fibrosis in CHC. Among the non-invasive methods, Fibrotest and Fibroscan are the most widely used in our country and offer a viable alternative to LB for pre-treatment assessment of liver fibrosis in patients with CHC. This review aims to discuss the advantages and usefulness of non-invasive methods of liver fibrosis in CHC. **Key words:** CHRONIC HEPATITIS C, LIVER FIBROSIS, LIVER BIOPSY, FIBROTEST, FIBROSCAN.

Chronic hepatitis C (CHC) is a major public health problem and a leading cause of cirrhosis, end stage liver disease and hepatocellular carcinoma (1). An estimated 180 millions people are affected worldwide, and the health burden associated with CHC is expected to increase during the next 20 years (2). Liver fibrosis and its end-point cirrhosis are the main causes of morbidity and mortality in patients with CHC and therefore, the assessment of fibrosis is an important issue in the management of these patients (3). Liver biopsy (LB) is still regarded as the „gold standard” for evaluating the liver fibrosis in spite of its several shortcomings: 1) inter-observer and intra-observer variability of histopathologic interpretation: there are significant differences between pathologist’s interpretation of the biopsies (4); 2) sampling errors: inadequate biopsy specimens size will make histopathological examination irrelevant and miss the diagnosis of cirrhosis in more than 25% of patients (5); 3) complications may be minor (anxiety, pain, transient hypotension) or major, including bleeding (intra-hepatic, intra-peritoneal), bile-peritonitis, puncture of pleura, colon,