Gastroenterology 2020- Multi parameter approach at the diagnosis of the stage and severity of chronic hepatitis- N.M. Mamajanova

Abstract:

Study relevance:
The chronic hepatitis, especially with viral etiology are considered to be valuable problem of the public healthcare due to the wide spread, long lasting course and adverse complications. The main aim of this study was determining the multi parameter ultrasound approach at the validation of stage activity of the disease in patients who has a verifies diagnosis of chronic hepatitis.

Materials and methods. There were three groups formed from 172 people for the investigation. The first group consisted of 80 patients with verifies diagnosis of chronic hepatitis, who have no any clinical laboratory data for the signs of liver cirrhosis. The second group consisted of 72 patients with different somatic pathologies without chronic hepatitis. The third group consisted of 20 professional sportsmen. The complex investigation, liver ultrasound and elastography of the patients of all groups was conducted. By the standard methodic the doppler ultrasound conducted to investigate the blood circulation of the portal vein.

Results and discussions.
According to our study, ultrasound signs were present in 35% of patients with chronic hepatitis in a seroscale ultrasound examination. The echo graphical signs, mentioned in the literature as typical for chronic hepatitis, were even observed in young healthy people in 2 cases (11%). In the group of patients without liver disease, the described symptoms occurred in 8 (10.5%) cases. The most common symptom was the liver parenchyma echogenicity. In all patients of the chronic hepatitis group with weak liver fibrosis, the portal vein diameter did not significantly change. The doppler graphical data more clearly showed the difference between the groups. In all patients with mild hepatic fibrosis, the portal vein diameter increased, but the changes were not significant. As the severity of the liver parenchyma fibrosis increased, a varied change in blood flow velocity in the portal vein was noted. In patients with severe fibrosis, a decrease in the average blood flow velocity in the portal vein was noted. The presence and stage of fibrosis do not significantly affect the frequency of manifestation of each of the studied symptoms, however, the frequency of absence of echographic changes in the liver is significantly lower in healthy people than in hepatitis with severe fibrosis.

Conclusions
The ultrasound liver examination is not considered to be sufficient to diagnose the chronic hepatitis, and assess its stages and activity.
The doppler graphic study is informative for the differential diagnosis of stages of liver fibrosis.

Key words - chronic hepatitis, ultrasound, dopplerography, echo structure, echogenicity, fibrosis.

Consistent hepatitis B disease (HBV) pollution impacts a normal 370 million people worldwide.[1] [Figure 1].[2] Chronic hepatitis B misleadingly causes liver mischief over years and decades with no notification symptoms or signs. Up to 25–35% of spoiled in individuals in the long extraordinary to liver disillusionment and hepatocellular carcinoma (HCC) started by HBV.[3] Screening those individuals at risk for picking up hepatitis B, and general vaccination for contravention of acquiring, would help in compelling the spread and general prosperity repercussions of the contamination, especially in countries where this disease is logically normal.

But various new antiviral medicines have been delivered for the organization of hepatitis B, they in spite of everything don't offer the opportunity of fix. When starting treatment for HBV, it is basic to evaluate the potential focal points of treatment with respect to peril, responses, hindrance improvement and cost, the vast majority who start oral suppressive treatment will be uncertainly compensated.
Consistent disguise of HBV replication in asymptomatic individuals with bleeding edge liver disease postpones life, decreases prerequisite for liver transplantation, and conceivably diminishes the danger for HCC.

In this clinical review, we present a helpful method to manage shirking of and screening for HBV, the typical history of HBV, similarly as its organization.

Zones of the world with low-ordinariness of HBV bearers (0.1–2% of the masses) consolidate Canada, the United States, Western Europe, Australia and New Zealand, Areas of the world with the most important transcendence (10–20%) fuse Southeast Asia, China and sub-Saharan Africa. This gigantic assortment in carrier rates can be explained by contrasts in the courses of transmission and time of infection. In low-transcendence zones, tainting is fundamentally acquired in adulthood through sexual and parenteral introduction, realizing a by and large safe of chronicity (5–10%). In regions of higher power, sickness similarly occurs through intra-familial spread in the perinatal period (90%) or in youth (20%), achieving a high peril of chronicity.

Hepatitis B disease transmission is connected with growing viral loads and is more overwhelming than either hepatitis C or HIV, with a transmission pace of up to 30% being represented. HBV presentation can occur in the going with conditions: Sexual contact (accessory polluted with HBV, different sexual assistants, men who have sex with men), parenteral contact (mixture sedate customers, hemodialysis, social protection workers), nuclear family contact (corrupted watchmen/kinfolk, shared individual tidiness things like toothbrushes, very sharp prepares, nail scissors). These select masses should be routinely screened by testing for hepatitis B surface antigen (HBsAg), neutralizer against hepatitis B surface antigen (adversaries of HBs), and balancing operator against hepatitis B focus antigen (threatening to HBc). Adversaries of HBs antibodies, present as a remainder of prologue to past HBV malady or affected through immunization, secure against the establishment of pollution by official and murdering the contamination before it can spoil the liver. Those negative for all of the three markers are in peril for HBV infection and should be inoculated if they remain at high risk of introduction. The people who make certain

for foes of HBs alone were likely immunized before are up 'til now resistant. Those positive for antagonistic to HBc and foes of HBs have recently been introduced to HBV previously and, in like manner, don't require inoculation.

The understanding of the basic history and the leading body of ceaseless HBV has gained impressive ground over the span of the latest couple of decades. Expectation of obtainment through general vaccination and screening for HBV in individuals in peril are the ideal general prosperity procedures that have been built up in various countries around the globe. There is an increasingly critical activity for expectation of hepatic cirrhosis and HCC, given our ability to affect the basic history of HBV through antivirals. The above strategies will in a perfect world proselyte into improved clinical outcomes and lessen the fiscal impact of this wearisome overpowering disease.

This work is shortly presented at International Conference on Gastroenterology and Liver on March 18-19, 2020 at Amsterdam, Netherlands.