

LABORATORY CHARACTERISTICS OF VIRAL HEPATITIS V AND C DISEASE

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Abstract: Liver diseases caused by viruses are very common in the world. Today, he was diagnosed with hepatitis V and C, a liver injury without any clinical symptoms, and cirrhosis of the liver, leading to hepatocellular carcinoma. Laboratory testing methods play an important role in preventing the consequences of illness and increasing the results of pregnancy. The article provides information on laboratory tests for viral hepatitis V and C.

Keywords: viral hepatitis, cirrhosis, laboratory, genotype, to be adjusted, results.

Today, viral hepatitis, especially type V C, is one of the most dangerous infectious diseases in the world. According to the information of the World Health Organization (WHO), millions of people are infected with hepatitis viruses every year, and a large part of them die due to the consequences of the disease. In Uzbekistan, viral hepatitis is epidemiologically important, especially in the Aralboy region, and the prevalence of the disease remains at a high level. A number of measures have been taken by our government for the same reason. May 24, 2021 of the Ministry of Health of the Republic of Uzbekistan No. 110 "On the implementation of early detection methods of viral hepatitis B and C types among the people of the Republic, and the introduction of special therapy to prevent complications" Order No. PQ-243 dated May 16, 2022 "On the development of anti-inflammatory drugs against the spread of certain important viral infections", as well as Decree No. 95 of May 1, 2023 of the Ministry of Health of the Republic of Uzbekistan "On the prevention of viral hepatitis V among the population" Early identification of species In the orders about the use of drugs, it is considered to be an effective medicine for the prevention of diseases. In preventing the consequences of illness and increasing the results of pregnancy, the laboratory also plays an important role in instrumental examination methods. According to the information of the World Health Organization (WHO), 50 mln. people get sick with viral hepatitis V (VGV), 2 mln. Shechem was born to man [16, 367b]. Laboratory diagnosis of viral hepatitis is one of the actively developing branches of medicine. During the last 60 years, since the "Australian antigen" was injected, the cause of hepatitis was found to be co-plegan viruses. The sensitivity of the serological markers of infection, the specific methods of detection of viral hepatitis with the help of specific methods,

not the etiology of viral hepatitis, have exceeded the possibility of monitoring of vaccine prevention. [18, 26b; 16, 367b 14, 384b]. Conventionally, methods of laboratory diagnosis of viral hepatitis are divided into 2 groups: methods of molecular biological detection and analysis of virus nucleic acids, which are called antibodies against viral antigens. The methodological base and the evolution of diagnostic drugs brought about complete changes in the laboratory diagnosis of viral hepatitis. The accumulated knowledge about the etiology and pathogenesis of these infections in humans serves as a basis for modern diagnosis. Finally, it is important to note that accurate information about specific markers of viral hepatitis infection is important for diagnosis, but it is a part of the immune system. [18, 26b; 9, 384b]. Diagnosis of viral hepatitis V. Currently, VGV is the most widespread infection in the world. More than 2 billion people in the world have detected markers of HBV infection. About 400 million people are estimated to be infected with HBV. According to the causes of death, VG is ranked first, according to the criterion of "potential life-threatening diseases", it has a stable third place, only pneumonia is followed by acute diarrhea. In Germany, HBV-infection is associated with more than 1 million deaths, including liver cirrhosis (700 thousand) and liver cancer (300 thousand). It has 10-30% of viral hepatitis. Standard laboratory tests for the diagnosis of viral hepatitis V are the same for all types of hepatitis. Hepatitis V (VGV) is a diagnostic marker of HBsAg, which appears in the blood serum of patients after the completion of the incubation period (1-4 months). In most cases, this marker disappears from the blood serum 4-6 months after the onset of the disease, before that, the normalization of the biochemical indicators of liver function is a clinical problem [18; 26-27 b, 14, 84b, 6, 367b]. In viral hepatitis, the standard of laboratory tests is based on the clinical analysis of blood: with the determination of platelets; Urine analysis is the detection of all pigments in urine. Checking the amount of bilirubin during biochemical blood analysis; alanine aminotransferase (ALT), aspartate aminotransferase (AST) activity, thymol test, prothrombin index were determined. All types of hepatitis: anti-HAVIgM, HBsAg, anti-HBcIgM, anti-HCV, so immunological examination is mandatory [16, 367b].

Complex laboratory-instrumental izertlew óz work:

- clinical analyzes of blood and urine.
- sugar biochemical examination: fractions of bilirubin, ALT, AST activity, GGTP, total protein, albumin, thymol test, prothrombin index, alpha-fetoprotein, immunoglobulins; - UDI of abdominal organs;
- checking blood for hepatitis V markers.

By IFA method: anti-HBc IgM, anti-HBc IgG, HBeAg, anti-HBe, anti-HDV IgG;

- testing of blood for HBV DNA by qualitative PShR method.

Clinical importance of laboratory diagnosis.

Serology plays a major role in the diagnosis of HBV, it is possible to distinguish between the following types of infection:

- Molecular analyzes that determine the inhibitory role of viral RNA in HCV are important.

- Laboratory monitoring is very important before and after two diseases. IFA (enzyme immunoassay) is a serological analysis method used to detect viral antigens or antibodies against viruses. He identified the immune responses produced in the body in response to the virus [20, 400; 16, 367; 66, 238b; 15, 101-135b].

1. Diagnosis of hepatitis V by IFA.

The following antigens and antibodies are detected by IFA analysis for hepatitis B virus (HBV):

- Marker analysis HBsAg (surface antigen) shows the presence of the virus in the body (active infection).

- Anti-HBs Immunity appears (after vaccination or infection) HBeAg shows the active level of the virus.

- Anti-HBe reduces virus replication.

2. Diagnosis of hepatitis C by IFA.

Only antibodies (anti-HCV) are detected by IFA for hepatitis C virus (HCV):

- Marker analysis Anti-HCV (IgG/IgM) body has an immune response against the virus.

- An active infection is possible.

- IFA analysis only shows the presence or absence of infection, PCR analysis is required to clarify whether the infection is active or inactive.

3. Park of IFA analyzes for hepatitis V and C.

Detection markers HBsAg, Anti-HBs, HBeAg, Anti-HBe, Anti-HBc (IgM/IgG) only Anti-HCV (IgG antibody/IgM antibody) Antigen/antibody antigen only antibody.

- It is not possible to distinguish active infection by IFA (markers have many possible causes) (activity should be determined by PSR).

- Pregnancy is detected by anti-HBs, al emlew jaq (now). 2. Diagnosis of hepatitis C by IFA.

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- It is not possible to distinguish active infection by IFA (markers have many possible causes) (activity should be determined by PSR).

- Pregnancy is detected by anti-HBs, al emlew jaq (now).
- Anti-HBc IgM cannot detect a recent infection (activity is not shown by IFA).

4. To cut short.

- Hepatitis B - various suppression of infection by IFA, improvement of the immune system and virus activity is possible. Now there is a set of markers.

- Hepatitis C - IFA indicates the presence of only one infection. PSR analysis is required to determine whether the infection is active or not.

1) PShR analysis.

PShR (PCR - Polymerase Chain Reaction) analysis is a molecular diagnostic method for detection of DNA or RNA of viral infections. The higher the accuracy, the higher the sensitivity [20, 400; 16, 367; 16, 238b; 15, 21-135b].

2) Types of PShR analyzes for hepatitis V and C viruses.

Type of analysis Hepatitis V Hepatitis C.

Qualitative PCR (Qualitative PCR) HBV DNA (bar/well) HCV RNA (bar/well)

Quantitative PCR (Quantitative PCR) HBV DNA viral load (copy/ml) HCV RNA viral load (IU/ml) Genotype (Genotyping) is little used, it is very important, based on the genotype [20, 400; 26, 367; 16, 238b; 15, 101-135b].

3) How are PShR results interpreted?

Hepatitis V (HBV DNA) PSR results:

Interpretation of results:

HBV DNA is an undetectable virus, but it's still very rare (it's like a fully vaccinated person, if there's no remission).

HBV DNA - detectable (eg: 2×10^4 IU/ml) virus active. Additional virus protection may be required

The higher the HBV DNA + HBeAg, the higher the virus activity, the higher the risk of infection.

Positive HBV DNA + HBeAg skin Mutant type is possible, emlew tactics alone.

Hepatitis C (HCV RNA) PSR results:

Interpretation of results HCV RNA - complete remission (successfully vaccinated) if the virus is not found in the body.

HCV RNA - detected (example: 1.5×10^6 IU/ml) Virus is active. The virus is infected, you need an email.

PShR on + Anti-HCV on Active infection (persistent hepatitis C).

PShR teris + Anti-HCV Anti-infection (acute infection, in remission)

4) Additional comments on PSR results:

- In case of hepatitis V, HBV DNA level is controlled by PSR. If it is more than 2000 IU/ml, even if there are changes in liver function, the medication is stopped.

- When treating hepatitis C, drugs are selected based on the genotype of the virus. Oral antiviral drugs are also used for infusion [20, 40; 16, 367; 26, 238b; 15, 74-64b]. HCV RNA - complete remission (successfully vaccinated) if the virus is not found in the body.

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If PShR detects HBV DNA, HCV RNA, PShR is positive for active virus. There is no infection if PShR skin is in remission or is fully vaccinated.

ON conclusion, the effect of the result on viral hepatitis depends on the level of DNA, and the level of RNA is also related to the genotype. Despite the great differences in the laboratory diagnosis of hepatitis V and C, the methods of liver biopsy diagnosis, serological markers are also seen in the assessment of viral activity. These differences require a separate

clinical trial for each virus. In each case, it is necessary to select a specific emlew tactic based on the laboratory results.

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