ARUPConsult

Hepatitis B Virus Testing

Click here for topics associated with this algorithm

INDICATIONS FOR TESTING
Acute onset
Jaundice
Viral illness

Hepatitis Panel, Acute 0020457
- Hepatitis A Virus Antibody, IgM 0020093
- Hepatitis B Virus Surface Antigen with Reflex to Confirmation 0020089
- Hepatitis B Virus Core Antibody, IgM 0020092
- Hepatitis C Virus Antibody 0020099

HBV surface antigen +
HBV core IgM abs + → **Acute HBV** Follow to determine resolution → Repeat test in 4-6 wks

HBV surface antigen +
HBV core IgM abs - → Possibly chronic HBV or contamination of specimen → Repeat test 4-6 wks

HBV surface antigen -
HBV core IgM abs + → HBV infection probably resolving

HBV surface antigen -
HBV core IgM abs - → **Consider other etiologies**
Autoimmune hepatitis
See Autoimmune Hepatitis Testing algorithm
Toxin-induced hepatitis
Alcoholic liver disease
Nonalcoholic acute steatohepatitis (NASH)
Other viral hepatitis
- Epstein-Barr virus
- Cytomegalovirus
- Enterovirus
- Hepatitis E in patient from endemic area

Other
- Granulomatous
  - Tuberculosis
  - Sarcoidosis
- Ischemic
- Hereditary
  - Wilson disease
  - Hemochromatosis
    See Hemochromatosis Testing Algorithm
  - α-1-antitrypsin deficiency

INDICATIONS FOR TESTING
Chronic
Moderately elevated transaminases
(Possible past history of hepatitis)

- Hepatitis B Virus Surface Antigen with Reflex to Confirmation 0020089
- Hepatitis B Virus Core Antibodies (Total) 0020091
- Hepatitis B Virus Surface Antibodies 0020090

HBV surface antigen +
HBV core abs +
HBV surface abs - → **Chronic HBV** likely → Repeat test in 4-6 wks To monitor therapy, use HBV DNA, HBsAg, HBsAb, HBeAg and HBeAb

HBV surface antigen -
HBV core abs +
HBV surface abs - → False + anti-HBc or chronic infection Consider HBV DNA testing and/or HBV vaccine followed by repeat HBV serology → Repeat test in 4-6 wks To monitor therapy, use HBV DNA, HBsAg, HBsAb, HBeAg and HBeAb

HBV surface antigen -
HBV core abs +
HBV surface abs + → Recovered from HBV infection

HBV surface antigen -
HBV core abs -
HBV surface abs + → Expected serology response from HBV vaccine

Test Key

HBV DNA - Hepatitis B Virus DNA Ultrasensitive Quantitative Real-Time PCR 0056025
HBsAg – Hepatitis B Surface Antigen 0020089
HBsAb – Hepatitis B Surface Antibody 0020090
HBeAg – Hepatitis Be Virus Antigen 0020094
HBeAb – Hepatitis Be Virus Antibody 0020095

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