HBeAg-Negative Hepatitis B

Normally, the hepatitis B virus (HBV) needs three proteins (also called antigens) in order to manufacture more HBV. These are called the core, surface, and “e” or HBeAg antigens. But some HBV, with certain mutations, are able to reproduce without the “e” antigen. This is called HBeAg negative hepatitis B.

*If you test positive for the “e” antibody, but continue to have elevated ALT and viral load (HBV DNA), you may have HBeAg-negative hepatitis B.*

Some researchers estimate that about 40% of adults with chronic hepatitis B have HBeAg-negative hepatitis B. This infection can be harder to treat. Doctors recommend treatment for HBeAg-negative patients if their viral load (HBV DNA) exceeds 2,000 IU/mL, even if their alanine aminotransferases (ALT) are normal.

If you have never been treated for hepatitis B, research shows that the antivirals entecavir (Baraclude) and tenofovir (Viread) appear to be most effective in lowering viral load (in about 90% of cases) and stopping liver damage (more than 75% achieve normal ALTs) but only while you take the antiviral medication, which comes in pill form.

Pegylated interferon, which is administered in a weekly injection for 48 weeks or longer, also appears to be only slightly effective in lowering viral load (in 19% of cases). About 59% reduced their liver damage and achieved normal ALT.

**People who have HBeAg-negative hepatitis B could have a lab test result that shows:**

- The surface antigen (HBsAg)
- The antibody to the “e” (HBeAg) antigen
- A moderate (2,000-20,000 IU/mL) to high viral load (HBV DNA)
- And, possibly, elevated ALT levels.