

EDITORIAL**HEPATITIS B VIRAL INFECTIONS: PREVENTION IS STILL THE KEY**

Hepatitis B viral infection is world- wide and in West Africa about 20% of apparently healthy population may be carriers. The DNA virus has three antigens: HBsAg, HBcAg, and HBeAg. The first has subtypes which are used to determine the different geographic distribution of the disease. HBeAg is the core antigen and is a marker of infectivity. After infection HBsAg appears first and lasts longest, followed by anti-HBsAg. HBeAg appears later to be followed by anti-HBcAg and anti-HBeAg. In the persistent carrier stage HBsAg persists in the serum and is an indicator of that state.

The liver changes are related to immune response of the host to the structural components of the virus. Chronic active hepatitis, macronodular cirrhosis and hepatocellular carcinoma may be the consequence. Transmission through blood transfusion is common. Drug addicts, homosexuals, workers in renal dialysis units are at risk of infection. Vertical transmission in pregnancy is important and in some countries infections in clustered families is found.

Immunization is indicated in health workers in constant touch with needles and syringes, inmates of prisons, sexual partners and family contacts of carriers, infants of carrier mothers and helpers in contact with refugees from the tropics where Hepatitis B is common. Active immunization using the surface Ag separated from the core is given in 3 doses: at 0, 1 and 6 months. Passive immunization is by hepatitis B immunoglobulin, HBIG (2). Post exposure protection is by a combination of HBIG and HBV vaccine. Pregnant women are to be screened for HBsAg. Neonates of

positive HBsAg mothers are given both active and passive immunization. The most commonly used antiviral agents for treatment are interferon, lamivudine, adefovir, entecavir and tenofovir. Response to therapy is assessed by the level of HBV DNA level. The treatment is expensive and the drugs have many side effects.

The global burden of Hepatitis B infection is enormous. The risk of developing cirrhosis and hepatocellular carcinoma is associated with disease activity and HBV DNA. The suppression of HBV DNA to undetectable levels is an important treatment goal of infected patients. The most recent treatment guidelines recommend prioritizing treatment in those with persistently abnormal ALT and HBV DNA replication as well as liver cirrhosis to reduce risk of liver cancer.

In the current issue of the Journal, Archampong and Nkrumah state that there is currently no structured national Hepatitis B treatment programme in Ghana. Patients frequently present with liver cancer and liver cirrhosis. In addition 23.3% had both ALT > 40IU/L and HBV DNA >2,000 IU/mL which are associated with increased risk of progression to cirrhosis and hepatocellular carcinoma. In achieving WHO recommendations there is the need for an affordable and sustainable screening and treatment programme for eligible patients including periodic ultrasonography surveillance and public education. Issah et al also in their study from Nigeria have emphasised the need to prevent vertical transmission of the disease by strategies that have been well documented.

JD Seffah
Editor-in- Chief
