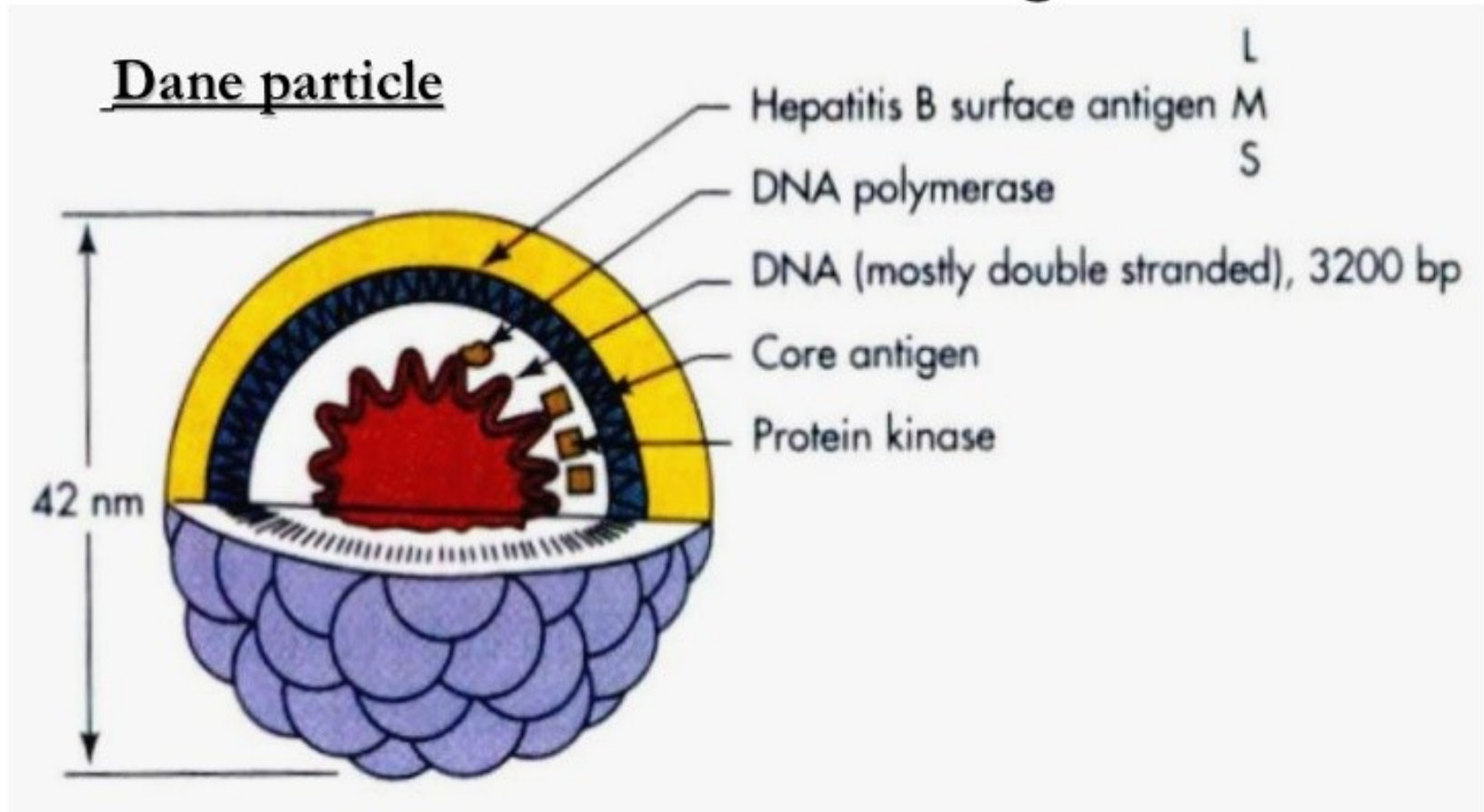


Hepatitis B Virus



HBV Structure & Antigens



HBsAg = surface (coat) protein (**4 phenotypes** : **adw, adr, ayw and ayr**)

HBcAg = inner core protein (**a single serotype**)

HBeAg = secreted protein; function unknown

Pathogenesis

- Mode of transmission – parenteral, perinatal and sexual.
- Clinical features : Preicteric phase, icteric phase, convalescent phase.
- Hepatitis B carriers – super carriers & simple carriers.
- Immune response – Humoral response (Ab to HBsAg, HBcAg, HBeAg) & Cell mediated immunity

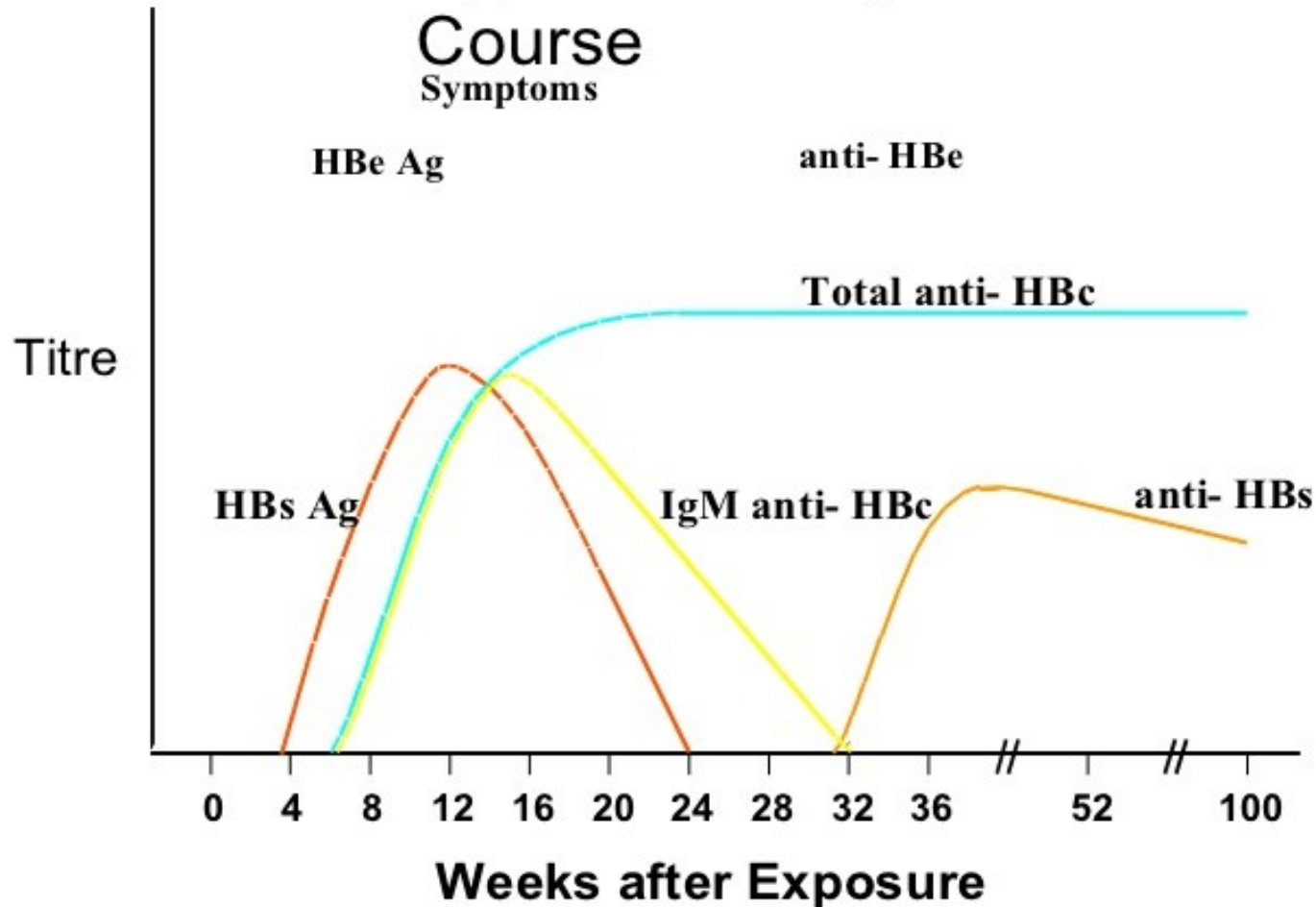
Lab Diagnosis

Acute Hepatitis B Virus Infection with Recovery

Typical Serologic

Course

Symptoms



Prophylaxis

- General preventive measures – Health education, improvement of personal hygiene, strict sterility practices, screening for HBsAg and HBeAg.
- Immunisation – Passive Immunisation (HBIG) & Active Immunisation - recombinant vaccine
- 3 doses – 0,1,6 months administered Intramuscularly.

Treatment

- No specific antiviral treatment available.
- Interferon alpha alone or in combination with antiviral agents such as
 - lamivudine
 - Telbivudine
 - entecavir