

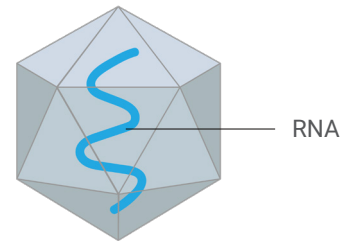
Hepatitis A virus infection

UNDERSTANDING THE PATHOGENESIS AND COURSE OF HAV INFECTION

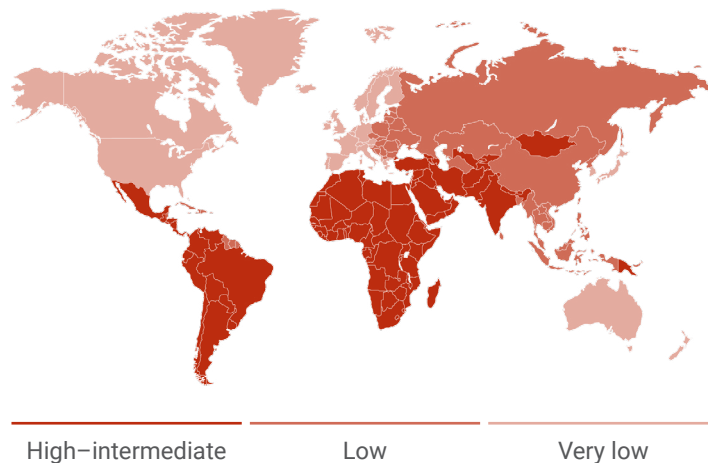
Profile

Hepatitis A virus (HAV) is a non-enveloped single stranded RNA-virus.

Genus: Hepatovirus
Family: Picornaviridae



Prevalence



Transmission

Fecal-oral: consumption of contaminated food or water
Person-to-person: household contact

Pathogenesis

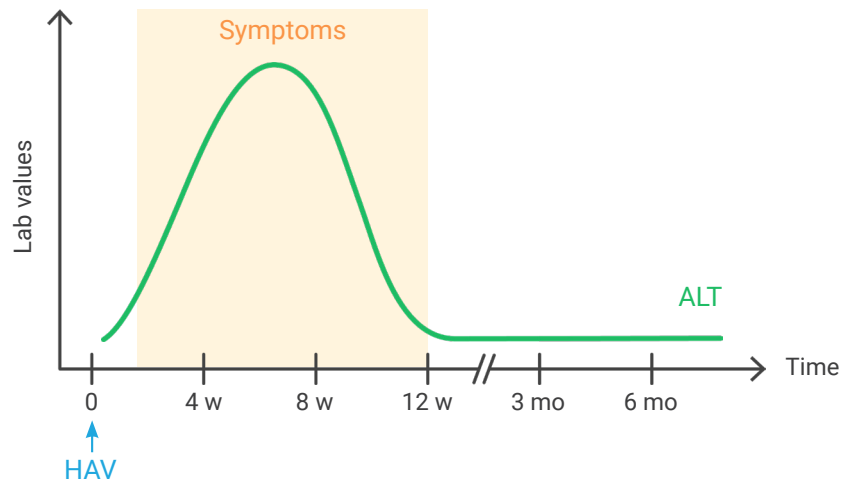
After transmission, the virus replicates in the cytoplasm of hepatocytes. With the help of the HLA system the immune system recognizes this alien attack. As a result, B lymphocytes induce the production of specific immunoglobulin M (IgM) antibodies against hepatitis A virus.

Shortly afterward, plasma cells produce specific immunoglobulin G (IgG) antibodies against hepatitis A virus. This immune activation leads to the damage and destruction of hepatocytes, which results in the clinical symptoms of HAV.

Clinical course

Incubation period: 2–8 weeks

Resolution: yes



ALT: alanine aminotransferase

Predictors of disease progression

There is no chronification of HAV infection and thus no progression to liver cirrhosis or liver cancer. Resolution of infections leads to lifelong immunity.



Further Reading

License: CC BY-NC-SA 3.0 IGO. 2017. *Global Hepatitis Report 2017*. Geneva: World Health Organization.

Matheny, SC and Kingery, JE. 2012. Hepatitis A. *Am Fam Physician*. **86**: 1027–1034.