

Hepatitis E virus

<http://revistabiomedica.mx/index.php/revbiomed/article/view/355>

DOI: <https://doi.org/10.32776/revbiomed.v14i3.355>

Cited in:

Rev Biomed 2003; 14:165-189.

Hepatitis E virus

Ariel Quintana-González

Physiology Institute, Saarlandes University, Germany.

Summary

Hepatitis E virus (HEV), a possible new member of the family Caliciviridae, is a non-enveloped virus, with a single-stranded, positive-sense RNA, which has three open and overlapping reading frames that code for proteins. structural and non-structural elements necessary for its replication cycle. It is transmitted predominantly by oral fecal route, through contaminated water and is one of the six main viruses capable of causing a clinical picture of viral hepatitis in man. In addition, it causes fulminant hepatitis in pregnant women, reaching up to 20% of lethality. It has a global geographic distribution, although it is only highly endemic in the Indian subcontinent, in central and Southeast Asia, the Middle East and part of Africa, where the largest and most important epidemics caused by this viral agent have been reported. After several years of study on the molecular epidemiology of HEV, the existence of epidemic and non-epidemic strains has been proposed, the latter being the cause of sporadic cases found in developed countries. The strains of HEV isolated in humans have a close genetic relationship with strains found in pigs, rats and chickens, suggesting that hepatitis E is a disease of possible zoonotic transmission. The antigenic variety among the strains does not seem to be as wide as that found genetically. However, the vaccine candidates in development do not clearly show a seroprotection against all the HEV genotypes described so far. Meanwhile, the good treatment of sewage and drinking water, they are the most effective methods for the control of the epidemics unleashed by the HEV. This article tries to summarize the current knowledge about the molecular and biological structure of the virus, as well as the epidemiology, the diagnosis of the infection, and shows how the incidence of hepatitis E behaves in different regions of the world.

Keywords: Hepatitis E virus; epidemiology

Reference

Tandon BN, Gandhi BM, Joshi YK. Etiological spectrum of viral hepatitis and prevalence of markers of hepatitis A and B virus infection in north India. Bull World Health Organ 1984; 62 : 67-73.