

# Review Article on Hepatitis E and Its Control

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DOI:10.21276/haya.2019.4.4.1

| Received: 15.05.2019 | Accepted: 22.05.2019 | Published: 28.05.2019

## Abstract

Hepatitis E is due to hepatitis E virus which causes the inflammation of the liver. It is the most common type of the virus among hepatitis A, B, C and D. Hepatitis E is virus that cause the millions of the infection in year. It is more acute in the pregnant women. It is so lethal and dangerous for those women. Hepatitis E is virus that is the major cause of the illness and is a reason of the major disproportionation of the death especially in the pregnant women. Hepatitis E is a most common types among all the types of the hepatitis A, B, C and D. It is mostly found in the Asia, Northern and Central Africa. There are the many reason through which it spreads. There are the many treatments are available for hepatitis E. But some are the use of the clean water. Use the food that is clean and there is no contamination in the food.

**Keywords:** Hepatitis E, Inflammation of liver, Central Africa.

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## INTRODUCTION

Hepatitis E is due to hepatitis E virus which causes the inflammation of the liver. It is the most common type of the virus among hepatitis A, B, C and D. It is the positive sense and non-enveloped. Non-enveloped means there is no covering of the protein. It is the RNA icosahedral virus. Infection that was caused by hepatitis E was discovered in 1955 in New Delhi, India. It causes acute infection in the individuals. It is more dangerous in the pregnant women as compared to the hepatitis A. There are the different types of the hepatitis E that causes the infection by various means. The infection that is caused by the hepatitis E is short term like acute infections. The types of hepatitis E are popular among the developing countries like United States and in the other countries. This is also common in the young people [1].

## Epidemiology

Hepatitis E is virus that cause the millions of the infection in year. It is more acute in the pregnant women. It is so lethal and dangerous for those women. Hepatitis E is virus that is the major cause of the illness and is a reason of the major disproportionation of the death especially in the pregnant women. It is most common and endemic in the Central Asia and in the other countries. There is recent outbreaks occur in the many developing countries. It causes the short term infections in the individual and due to poor management of the water it spreads from individual to individual.

## Classification

Classification of the hepatitis E virus is based the serotype of the virus. And the classification is based upon the sequences of nucleotide of the genomes. There are the different kinds of the genotypes. Genotype 1 has been categorized into five subtypes and it is isolated from the tropical and subtropical area. Genotype 2 has been classified into two subtypes and it is isolated from Mexico [2]. While genotype 3 and 4 has been classified into 10 and seven subtypes and these are isolated from the Europe. These are the most common types of the genotypes that are present among the hepatitis E.

## Transmission

Hepatitis E is a most common types among all the types of the hepatitis A, B, C and D. It is mostly found in the Asia, Northern and Central Africa. There are the many reason through which it spreads. The main causes of the infection are contaminated water and contaminated food. While the incubation time for the infection of the hepatitis E is 21 to 56 days. While the risk of the infection can be less due to the high temperature. The temperature is 70°C while keeping it for 20 minute. The occurrence of chances of the hepatitis E are rainfall and in the season of monsoon days. It is a widely present in the India. Hepatitis E causes acute and short term infections but are serious infections.

## Symptoms

There are a large number of the people that have the hepatitis E but they have no symptoms. But

when the people are suffered from the hepatitis E symptoms appeared before the 21 to 56 days of the infections. The symptoms are the vomiting that is the main cause of the hepatitis E. While the others are nausea, feeling too much tired when they do some work or after doing exercise. They don't eat. There are some problems occur in the stomach that makes the stomach weak that cannot properly digest the food. In this jaundice occur. In this condition color becomes the yellowish and eyes also change their color. Pain also occur in the liver or upon the liver in the abdomen [3].

### Prevention

The two main things that prevent the individual from the infection of hepatitis E. One is the sanitation and the second is the vaccine discovery. Sanitation consists on the appropriate management of the human waste and the contaminated water. Sanitation prevents from the infection of hepatitis E. While the other is vaccine development. Vaccine consists on the recombinant viral proteins. It was discovered in 1990 and applied in the high risk population of United States. The vaccine that was developed were effective and safe. But it was discovered by China. And it is not used in many other countries. The vaccine that was developed were known as HEV239.

### Diagnose of hepatitis E

In this doctor diagnose a disease, taking out their blood samples. There are so some specialist that can also diagnose the disease. In this doctor take out the blood from the body and then send it to the library for further analysis and test purpose. In this blood test can detects the antibodies that are present in the hepatitis E virus. So in this way doctor diagnose the disease that it is present in the person or not. While the way is the detection of the hepatitis E check it within the blood and stool samples are taken during the acute infection.

### Occurrence of infection

This may consists on many other types of disorders like body tiredness and this happens due to the low quantity of calcium in the body and especially in bones and in the condition of illness. In addition, hepatitis causes the many different kind of the infections In this there is no specific types of the treatment is present for to treat the infection.

### Disadvantages

Hepatitis E is diseases related to the feces and to the cavity that is present in the mouth. Hepatitis E virus transmits by many sources like the other viruses the most common Hepatitis A, B virus. All the viruses have many disadvantages like the other viruses. Hepatitis E virus can damage or harm the food and eatable things, water and other things that are associated to human. This can also transmit from the individual that has the Hepatitis E to the individual that has no Hepatitis by many oral route and by using their things

that are used by them. It transmits in the domestic areas by the usage of chicken that is uncooked. There are two and major kinds of infections one is permanent and other is temporary infection [4].

### Treatment

There are the many treatments are available for hepatitis E. But some are the use of the clean water. Use the food that is clean and there is no contamination in the food. Also use the food that have the healthy types of the carbohydrates, proteins and vitamins in it. Also drink the plenty of water that is clean from any type of the contamination. But there are also some types of the antibodies available. Doctor give the dietary supplements for the treatment of the hepatitis E [5-8].

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