Research and Reviews: Journal of Medical and Health Sciences

An Overview: Hepatitis B

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Short Commentary

Keywords: Hepatitis, HBV, Vaccine, Hemodialysis

Introduction
Hepatitis B is one of the most endemic diseases in most parts of the world. As estimated 240 million people suffer with HepatitisB every year. And to the chronic condition of Hepatitis B, over 78000 people die each year. And 65000 people die of cirrhosis and 13000 with acute sickness of Hepatitis B .This disease is most prevailed in Asia and parts of India. Almost the disease is treated only 25% on the whole. In Asia and India over 75% carriers are there and the prevalence rate is 2-8%. Hepatitis B is an occupational hazard in health workers and is treated now days by advanced safe medicine. Hepatitis B is caused by the Hepatitis B virus (HBV).

Symptoms
Infants and children are more affected with this hepatitis. The symptoms of this disease may not be easily identified in the early stages. The most common visible symptoms include nausea and vomiting, fatigue, loss of appetite, fever, joint pain, dark urine, muscle and joint pains, abdominal pain jaundice, itching, ascites, east bleeding and bruising. The infection may last within weeks in acute infection and if the body is not immune enough it may last to six months or lifelong causing the chronic stage of Hepatitis infection which leads severe damage of liver.

Acute illness of Hepatitis may last to 2or 3 weeks and liver may function normal within 4moths in most cases. In chronic sickness liver may be mostly or completely damaged and the chance of fatal condition may be 1 in hundred. The incubation period of the hepatitis B virus is 75 days on average, but can vary from 30 to 180 days. The virus may be detected within 30 to 60 days after infection and can persist and develop into chronic hepatitis B.

Transmission
This viral disease is transmitted from one another through the contact of the blood or other body fluids. The disease may widely spread having unprotected sex with infected patient, blood transfusions, From an infected mother to child, tattoo or acupuncture without sterilization, dialysis long term contact with blood at work (health workers).Hepatitis B can be an acute disease if not treated it may turn into chronic disease. This disease severely infects the liver. In the some cases it may lead to liver failure or cirrhosis of liver or cancer and permanent scarring of the liver.
Prevention and treatment

Hepatitis B virus is can prevented by the vaccination which 2 to 3 doses over six months period. The vaccine is given for in the childhood stage or adults. The vaccine is recommended for newborns, people with end stage kidney stage, people who do illicit drugs, tattoos and health workers, people with chronic liver sickness, and people who have unsafe sex, hemodialysis patients, and people living with HIV patients.

The virus can be prevented by proper awareness of this disease and the complication after it is infected.

Hepatitis B is treated well with Hepatitis B vaccine. This drug is administered in three doses over a period of six months. In the severe sickness of Hepatitis B the antiviral drugs like Telbivudine, lamivudine, adefovir, telbivudine, entecavir can be used. And other synthetic drugs like Interferon alfa-2b (Intron A) are used. In chronic stages if the liver is completely damaged liver transplant can be processed.

Over all study

Hepatitis B disease is mostly treated with HBV vaccine as a preventive measure rather being treated after the infected stage. Compared to the normal individuals it is little complicated to treat the patients with diabetes. In the case studies persistence of Hepatitis B comparison in gene mutation the persons with ccr5 showed 2.85 times low persistency when compared to that of persons without ccr5 mutation. The comparative study showed 1.3 times higher persistency in males than females. This study can lead to the possibility of administering ccr5 as a blocking agent along with the antiviral drugs in order to improve the efficacy of the vaccine on the infected organisms.

Vaccination in the preshool, schools and work places and proper level of the making the awareness of the disease can make the identification of the HBV virus and the increased level of prevention in both children and adults.

In the case of hemodialysis patients this Hepatitis can be prevented and controlled by giving special attention to cleaning control panels on the dialysis machines and other surfaces that are frequently touched and potentially contaminated with patients’ blood

Wearing disposable gloves, items taken into the dialysis station should be disposed of, dedicated for use only on a single patient, or cleaned and disinfected Clean and disinfect the dialysis station.

References


