The “3-C Steps” of Hepatitis B
Carrier, Chronic Hepatitis B and Cancer

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The liver is the largest organ inside the body and is essential to life. It is important: if the liver fails, the body will fail, too. Hepatitis B is the most common serious liver infection in the world. It is caused by the hepatitis B virus that attacks the liver. When the liver is attacked, a patient takes the “3 C steps”: Carrier, Chronic Hepatitis B and Cancer. Fortunately, the liver can function even when up to 75% of it is diseased or removed. This is because it has the amazing ability to create new liver tissue from healthy liver cells that still exist.

Hepatitis B Facts

Hepatitis B is caused by the hepatitis B virus that attacks the liver. The hepatitis B virus contains an inner core and outer envelope. There is an outer shell (or envelope) composed of protein that is termed "surface antigen" or "HBsAg". The outer shell surrounds an inner protein shell that is referred to as the core particle or "HBCAg", which contains the viral DNA and enzymes used in viral replication (called "DNA polymerase").

In the world, according to the World Health Organization, at least 550,000 people die each year from primary liver cancer. 2 billion people have been infected (1 out of 3 people). 400 million people are chronically infected. 10-30 million will become infected each year. An estimated 1 million people die each year from hepatitis B and its complications. In the USA, 12 million Americans have been infected (1 out of 20 people). More than one million people are
chronically infected. Up to 100,000 new people will become infected each year. 5,000 people will die each year from hepatitis B and its complications.

1st C, Hepatitis B Carriers

Hepatitis B carriers are people infected with the hepatitis B virus for life. Hepatitis B virus infects the liver and it is in blood, semen, menstrual blood, and other body fluids. Five to 10% of adults and about 90% of babies who get hepatitis B will go on to "carry" or keep the virus for the rest of their lives. They may not be sick, but they can pass the virus on to others and make others sick with hepatitis B.

The best solution is prevention. Asking a doctor about getting the safe and effective hepatitis A & B vaccine protects one for a lifetime. The CDC and the American Academy of Pediatrics recommend that all infants, children and adolescents up to age 18 receive the HBV vaccine. The vaccine is also recommended for all adults who may be at high risk for infection.

2nd C, Chronic Hepatitis B

Some people who have hepatitis B develop the chronic form of the disease. This means they continue to be infected with the virus for a long time and develop the complications of prolonged liver inflammation. The disease can eventually cause liver failure and death. Worldwide, chronic hepatitis B infections cause 80% of all primary liver cancer. Patients with chronic hepatitis B infections are clearly at increased risk for progressing to liver cancer, whether they develop cirrhosis or not.

Here are things people with chronic hepatitis B can do to help keep their liver healthy. The most important thing one can do is to have regular check-ups with either a liver specialist or a doctor knowledgeable about hepatitis B at least once or twice a year. Usually this includes blood tests, physical exam and ultrasound imaging of the liver.
Eating a balanced diet is another simple way to maintain a healthy liver. Although there is no diet specific for chronic hepatitis B, studies show that eating green and yellow vegetables is good for the liver. These tend to protect the liver against harsh chemicals. The American Cancer Society’s diet, which includes low fat, low cholesterol, and high fiber foods is beneficial as well. Another thing, one can do to maintain a healthy liver is to strictly limit or avoid alcohol. The usual treatment for hepatitis B is bed rest, a balanced diet, and avoidance of alcohol and certain medications for at least 6 months. Antibiotics are not useful in treating hepatitis. Except for more serious cases, it is usually not necessary to stay in a hospital. If you become severely dehydrated, you may need to go to the hospital to receive intravenous (IV) fluids. If you have chronic hepatitis B, you may need steroids, or you may be given injections of interferon, an antiviral drug.

3rd C, Liver Cancer

Liver cancer is a silent killer because the majority of the patients appear to be perfectly healthy and have no early signs or symptoms. It is among the top 3 causes of cancer deaths in many Asian and some African countries. Dr. R. Palmer Beasley is a first person who suggested that the hepatitis B virus caused liver cancer in the 1970s. Since then, the “War on Cancer” had begun in 1975, and the focus was substantially on environmental causes.

Pain is uncommon until the tumor is quite large, and some large tumors don't even cause pain or other symptoms. A study is showing that people with hepatitis B surface antigen are at least 60 times more likely to develop liver cancer than those without it. That relative risk is much larger than even that for smoking and lung cancer (20-25 times).

The final solution is screening frequency and treatment. Hepatitis B carriers who become infected early in childhood have a high risk of developing liver cancer whether they have cirrhosis or not. The risk is greater in men and those with
family history for liver cancer. Screening for liver cancer is the only effective way of improving the outcome of treatment. Evaluation of liver cancer ultrasound and conventional CT scan are regularly obtained in the diagnostic evaluation of HCC (hepatocellular cancer or primary liver cancer), but they are often too insensitive to detect multifocal small lesions and for treatment planning.

Hepatitis B liver cancer treatments include surgery, chemotherapy, radiation therapy, immunotherapy, and vaccine therapy. Some natural treatments such as Qigong, Chinese medicines, and others are good for people who have the “3 Cs”. For example, a western herb milk thistle (Silymarin) has been used in thousand years and studied extensively the laboratory for the treatment of acute and chronic liver disease, and to a lesser extent for some types of cancer. Some research indicates that Silymarin may be a useful chemical for treating various liver diseases, particularly those caused by excess toxins.
References

When R. Palmer Beasley suggested in the 1970s that the hepatitis B virus caused liver cancer, scientists all across the country said "definitely not." In honor of his achievements, Beasley was awarded the King Faisal International Prize in Medicine, given by King Faisal Foundation, Saudi Arabia, and the General Motors Charles S. Mott Prize in 1986 for research into the cause and prevention of cancer, a major American prize for cancer research.


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