Taking hepatitis out of circulation

Prevention and treatment can block a worldwide health threat with many forms

The specialist: Dr. Douglas Dieterich on viral hepatitis

As a professor of medicine with more than 30 years of experience, Dieterich is a gastroenterologist and interist who treats outpatient liver disease. He sees about 60 viral hepatitis patients a week.

Who's at risk

Viral hepatitis is an umbrella term for the disease that results from several specific viruses that primarily attack the liver and cause inflammation. Researchers have identified strains of hepatitis A, B, C, D and E, which have different modes of transmission.

"Hepatitis B and C are a huge problem," says Dieterich. "Hepatitis B is the biggest worldwide infection, with probably 1 billion people infected, and hepatitis C affects another 500 million or more people worldwide." About 3 million to 4 million Americans have hepatitis B, and doctors speculate that as many as 10 million may have hepatitis C, with the majority of cases remaining undiagnosed.

Diagnosing and treating viral hepatitis is essential because it is the main cause of cirrhosis and liver cancer. "These are very preventable and treatable diseases," says Dieterich. "There's a vaccine for hepatitis B, which is most often passed from mother to infant or sexually transmitted. There's no vaccine for hepatitis C, which is transmitted via blood, but doctors have increasingly effective medications for treating both hepatitis B and C.

The groups at highest risk of hepatitis B are people born in Asia and sub-Saharan Africa, where 50% of the population is infected. "The No. 1 method of transmission worldwide is maternal-fetal transmission at birth," says Dieterich. "Even at a major hospital in New York last year, the transmission rate from infected mothers to their babies was almost 50%.

Less easily transmitted than hepatitis B, hepatitis C is spread through blood. "Its main risk factors are anything with blood-to-blood contact: IV drug use, intranasal cocaine, tattoos, body piercing, needle sticks for health-care professionals, maniacs and pedicures," says Dieterich. For Americans, a major risk is having received a transfusion before 1992 when effective screening for hepatitis C came into use. "Generally, it's transmitted by blood, not by sex, but there is an outbreak of hepatitis C in HIV-positive men who have sex with other men," says Dieterich.

What you can do

Get informed.

The American Liver Foundation (liverfoundation.org) and hepatitis B Foundation (hepb.org) have excellent Web sites that are easy to navigate.

Get tested and get vaccinated.

"One test should be enough, unless you have further risks," says Dieterich. "Everyone should be vaccinated against hepatitis A and B." Having liver enzyme levels that are normal is no guarantee that you don't have hepatitis, and is not an effective way to test for hepatitis.

Protect your blood.

Don't drink alcohol or take over-the-counter medicines in excess. Practice safe sex, and don't share needles.

Be careful about instruments that can transmit blood.

"If you get a tattoo, make sure they change the needle and ink," says Dieterich. "Bring your own instruments for manicures and pedicures." About 3% of the U.S. population has hepatitis C. About 2% of the U.S. population has hepatitis B. "Hepatitis B is hard for us to understand but easy to treat," says Dieterich. "We have very good medications that can prevent the virus from replicating, thus preventing it from causing cirrhosis and liver cancer." However, doctors can't usually cure hepatitis B. "Right now we approach this disease like diabetes and hypertension - if we control it, the long-term complications can be prevented," adds Dieterich.

Early detection is key because it allows doctors to manage the virus before it causes liver damage. "The pills are viral and very effective, with virtually no side effects," says Dieterich. "But it can be hard for people to understand that they have to take the drugs for the rest of their life."

About 3% of people per year clear hepatitis B on treatment compared to less than 1% of those not on treatment. In contrast, hepatitis C is easy to understand but more difficult to treat. It can, however, be cured. "Once it's cured, it's cured," says Dieterich. If the treatment is currently difficult, consisting of a once-a-week shot of interferon, accompanied by the pill ribavirin taken twice daily. The therapy lasts for either 24 or 48 weeks, depending on what kind of hepatitis C is involved. The success rate is 40%-60%, but the side effects can be very taxing.

The good news is that a new wave of less-difficult treatments is just over the horizon, says Dieterich.

Research breakthroughs

"We're about to have a huge revolution in the treatment of hepatitis C," says Dieterich. "There are about 26 new drugs converging on the disease right now." Doctors expect the first two will be approved by the FDA in the third quarter of 2011. In clinical trials, one drug increased the cure rate by 40%-75%, and for half of the patients, it cut treatment from 48 to 24 weeks. "Those are the first shots fired in this revolution," says Dieterich. "In 10 years, we'll probably be able to treat hepatitis C without interferon, which has the worst side effects of these drugs." It is important, though, not to delay treatment in anticipation of new therapies. The death rate from hepatitis C is expected to quadruple in the next 10 years in the U.S., and many people cannot afford to wait for treatment.

Questions for your doctor

Two good questions for your doctor are: "Have I been vaccinated for hepatitis A and B?" and "Am I immune?" The doctor can tell both things from a blood test. If your test for hepatitis B or C is positive, ask "Can you refer me to a specialist who treats hepatitis B and C aggressively?"