Hepatitis B: prevention and treatment

As many as 2 billion people worldwide will be exposed to hepatitis B during their lifetime, says <u>David Rzepczynski, MD</u>, a gastroenterologist at <u>OSF HealthCare in Urbana, Illinois.</u> Around 250 million people have chronic inflammation of the liver from hepatitis B or are carriers of the virus without inflammation. And around 890,000 people will die from hepatitis B. Asia and Africa are hepatitis B hotspots, Dr. Rzepczynski says, while the United States doesn't have it as bad.

The statistics might make eyeballs widen, but Dr. Rzepczynski says they are not a reason to panic.

"The majority of people who get exposed to hepatitis B in the adult age – after age 10 – it's typically a condition you recover from without chronic inflammation," he says.

The reason for the optimism? There's a vaccine for hepatitis B that's been around since the 1980s.

"There has been an aggressive program of initiating vaccines with kids, sometimes even as young as infants, to have protection," Dr. Rzepczynski says. "And when those [vaccines] are administered at a young age, it's a highly effective vaccination. This vaccination has an efficacy of 95%-plus in the general population."

The three-shot series is sometimes given soon after birth due to concerns that the mother may pass along hepatitis B to their child. But older children and adults can and should get the vaccine, too.

A hepatitis B immune globulin shot (HBIG for short) may also be appropriate in cases of hepatitis B exposure, either in adults or newborns. The particles in the shot attack the virus.

The next best way to avoid hepatitis B is to avoid risky behaviors.

Don't share needles, toothbrushes or any other object that can transfer bodily fluids. Practice safe sexual relations. And if you're bleeding, bandage it up right away.

Treatment

Dr. Rzepczynski says blood tests and watching symptoms can gauge how the virus is behaving. That will determine whether the person just needs monitoring. Or the patient may need medical treatment to suppress the virus and prevent cirrhosis of the liver. These medicines are taken by mouth, and side effects are generally not significant. A vaccine to completely eliminate hepatitis B hasn't been discovered yet.

Treatment plans for hepatitis B may be life-long.

"If you stop taking the medicine, it's like taking the brakes off the system," Dr. Rzepczynski explains. "The virus will end up reactivating. And in fact, that reactivation might cause liver failure because the virus level skyrockets. And your body's immune system senses that and starts attacking the liver to get rid of the virus. And that can lead to very serious and acute inflammation of the liver."

Should I test?

Dr. Rzepczynski says a blood test for hepatitis B isn't something that constantly needs to be on the mind of the average person. But the following people should consider getting tested:

- People who come from areas of the world with a high prevalence of hepatitis B
- Pregnant women

- If you plan to donate blood or organs
- People who've had an exposure to the virus
- People getting chemotherapy for cancer treatment

That last one is something medical professionals have looked closely at in the last five years.

"Unfortunately, some of these powerful cancer agents also have the ability to affect the immune system in such a way that a person who's had hepatitis B and maybe even has gotten over it can have a reactivation of hepatitis B when these particular agents are used," Dr. Rzepczynski says.

In that case, your cancer doctor would alter the treatment to allow it to proceed without the hepatitis B risk.

Be proactive

If you have questions about hepatitis B, want to get the vaccine or think you may have been exposed to the virus, talk to your primary care provider right away. The <u>OSF HealthCare</u> and <u>U.S. Centers for Disease Control and Prevention</u> websites also have information on hepatitis.