

THE DAILY CHECKUP BY KATIE CHARLES

Hepatitis C, from A to Z

The virus, which infects millions of Americans, can lie low for years until it wreaks havoc with your liver. Treatments include antiviral drugs and transplants

► The specialist: Dr. Leona Kim-Schluger on hepatitis C

Kim-Schluger, the associate director of the Recanati/Miller Transplantation Institute, is a hepatologist who oversees the running of the multiorgan transplant center and specializes in liver problems.

► Who's at risk

Hepatitis C is a disease of the liver; there are five hepatitis viruses, and this one has one of the highest rates of progression to chronic disease. "Hepatitis C is a viral infection that causes inflammation of the liver that can lead to increased scar tissue and eventually to cirrhosis," says Kim-Schluger. "About 4 million Americans are infected with hepatitis C — 1.6% of the population."

Hepatitis C is a blood-borne disease whose underlying virus was only isolated in 1989.

"If you look the number of new infections through the decades, a large percentage of patients were infected before 1992, when we developed a good test for hepatitis C," says Kim-Schluger. "Infection rates dropped precipitously after that." Because the blood supply wasn't being reliably screened for hepatitis C until 1992, many Americans were infected as the result of blood transfusions.

The two groups at highest risk of the disease are people who received transfusions before 1992 and IV drug users.

Other groups at risk are people who have used intranasal cocaine, hemodialysis patients and health-care workers who are pricked by needles.

The virus can also be sexually transmitted. "The risk increases with high-risk behaviors like multiple partners," says Kim-Schluger.

► Signs and symptoms:

For many patients, the diagnosis of hepatitis C comes without warning signs. "The tricky thing is that the majority of people are asymptomatic, or only have vague symptoms like feeling fatigued," says Kim-Schluger. "So it is up to the doctor to ask about the risk factors and then screen people who are at risk."

Up to about 15% of people infected by the hepatitis C virus are able to clear it from their bodies spontaneously. "The other 85% will continue to have virus within their blood," says Kim-Schluger. "Of that group, about 20% of will develop cirrhosis and 1% to 5% will develop liver cancer related to cirrhosis."

With an infected population of 4 million, these percentages indicate that there will be hundreds of thousands of cases of severe liver disease caused by hepatitis C in the next 10 to 20 years.

Hepatitis C usually has a long latency period, during

► What you can do

Get screened.

If you have risk factors for hepatitis C, find out if you have the infection.

Get informed.

The American Liver Foundation (liverfoundation.org) runs a help line and has great info online about local and national resources.

The American Association for the Study of Liver Diseases also has a handy patient portal (aasld.org/patients) with digests on screening, treatment and finding a physician.

Don't keep damaging your liver.

If you're diagnosed with hepatitis C, avoid alcohol and marijuana.

"These two drugs speed up the formation of scar tissue in the liver," says Kim-Schluger.



TANYA BRAGANTI

New drugs, used in combination with current ones, show promise, according to Dr. Leona Kim-Schluger.

which the virus lies dormant. "The delay between infection and end-stage liver disease varies a lot, depending on factors like when you were infected and your gender," says Kim-Schluger. "It's usually about 30 years from infection to cirrhosis." Using alcohol and marijuana shortens this lag.

The disease also progresses faster in people who are older than 40 when they get infected. Premenopausal women are slightly protected by estrogen, which may slow fibrosis, the growth of damaging scar tissue in the liver.

Patients do start to show symptoms when they reach end-stage liver disease. "By this time, there is often bleeding in the esophagus or the stomach," says Kim-Schluger. "That has to do with the scar tissue causing increased pressure and causing portal hypertension" — high blood pressure in the portal vein, which serves the liver.

Often, fluid builds up in the abdomen, and the liver stops clearing the toxins it can ordinarily remove.

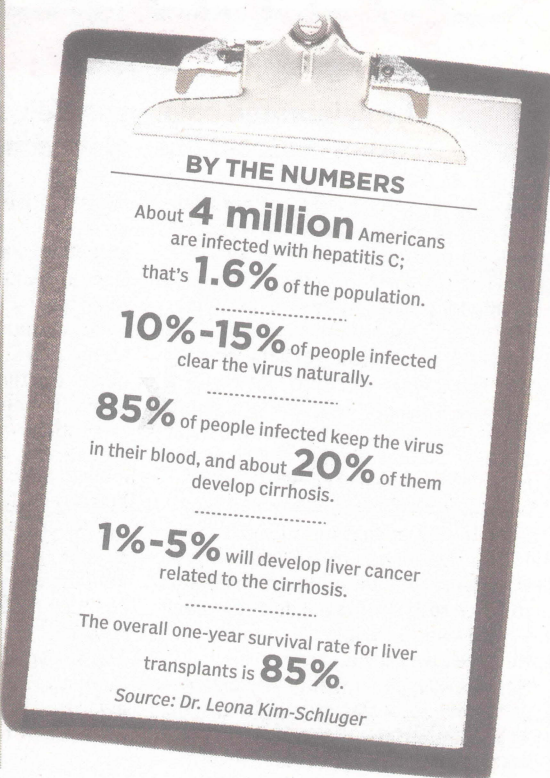
► Traditional treatment

Hepatitis C isn't treated until it becomes chronic, which means the body hasn't cleared the virus on its own. "The first line of treatment is a combination of drug therapies," says Kim-Schluger. "Pegylated interferon is an injection that you get once a week, and ribavirin is a drug that you take every day." Depending on the genetic makeup, or genotype, of the virus you have, the therapy lasts six to 12 months.

Right now, the success rate for these antiviral treatments is about 50%. "If the treatment is successful, it gets rid of the virus," she says. "But it's difficult treatment, and there are many side effects."

Patients have three types of responses to the therapy. "Responders clear the virus, and nonresponders don't clear it at all," says Kim-Schluger. "Relapsers clear the virus during therapy, but afterward it comes back."

For patients whose hepatitis C progresses to cirrhosis



and then end-stage liver disease, a transplant is the sole remaining option. "The only way to survive end-stage liver disease is a transplant, and the overall transplant survival rate after one year is 85%," says Kim-Schluger. "Unfortunately, the virus doesn't go away after transplant, so there are issues of recurrent disease after transplant."

Beyond liver transplant, "the next step would be a cure, and I am hopeful that there will be a cure during our lifetime," says Kim-Schluger.

► Research breakthroughs:

Doctors are continually improving the treatments available for hepatitis C, so they can bring relief to a higher percentage of patients. "There are new protease and polymerase inhibitors coming out in the near future, as soon as 2011-2012," says Kim-Schluger. "You have to use this therapy in conjunction with the interferon and ribavirin, but then it increases the response rate from 50% to 70%."

► Questions for your doctor:

If you're diagnosed and need therapy, the key question to ask is, "What can I expect in terms of side effects?" Some of the best medications can cause psychiatric side effects, so it's essential to talk to your doctor about your psychiatric history and any other medications or herbal supplements you're taking.

Another good question is, "What genotype of hepatitis do I have, and how does that affect the outcome of therapy?" Your options will depend on which genotype you have.

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