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 multibillion 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 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 1988 and IV drug users. Other groups at risk are people who have used intra-nasal 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 25% of people infected by the hepatitis C virus are able to clear it from their bodies spontaneously. "The other 75% will continue to have virus within their liver," says Kim-Schluger. "Of that group, about 20% 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 30 years.

Hepatitis C usually has a long latency period, during 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 40 years from infection to cirrhosis." Using alcohol and marijuana shortens this lag. The disease also progresses faster in people who are older than 45 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. "Polyvalent 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. "Helpers clear the virus during therapy, but afterward it comes back."

For patients whose hepatitis C progresses to cirrhosis and then end-stage liver diseases, 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 80%," 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.

KNOWLEDGE IS POWER: Keep up with the latest developments in the science of health at NYDailyNews.com/health