A Guide to Hepatitis C Treatment

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Over years or decades, chronic hepatitis C can lead to serious complications. Fortunately, today's direct-acting antiviral (DAA) therapies are highly effective and easy to use, and almost everyone can be cured.

Hepatitis C virus (HCV) is a blood-borne virus that attacks the liver. It can be transmitted through contact with blood (for example, when sharing drug injection equipment or personal care items like razors) and via sex. While about 25% of people clear the virus spontaneously without treatment, most people develop chronic infection.

HCV causes liver inflammation, which over time can lead to fibrosis (buildup of scar tissue), cirrhosis (severe scarring) and hepatocellular carcinoma, the most common type of liver cancer. In the most advanced cases, the liver can no longer carry out its vital functions and a liver transplant may be necessary.

The previous standard of care for chronic hepatitis C was interferon-based therapy, which involved weekly injections of pegylated interferon plus daily ribavirin pills for six months to a year. This regimen caused difficult side effects, and it cured only about half of treated patients.

But that all changed in 2013. Today's DAA regimens are taken as pills for just two or three months and have few side effects, and more than 90% of people are cured with their first course of treatment.

Which Treatment Should I Use?

Which DAA regimen to use depends on several factors, including HCV genotype, liver disease severity, other health conditions and previous treatment attempts. Some medications work only against specific genotypes, but the newest ones—known as pangenotypic drugs—work against all of them.

Hepatitis C treatment guidelines are simplest for adults who are being treated for the first time, do not also have hepatitis B or HIV, are not pregnant and do not have cirrhosis or liver cancer. Most people with such straightforward cases won't need to see a specialist and can be treated by their

primary care provider.

The recommended regimens for this group are Mavyret (glecaprevir/pibrentasvir) or Epclusa (sofosbuvir/velpatasvir). These medications work against all HCV genotypes, so genotypic testing is usually not needed before treatment. People using Mavyret take three pills at the same time once daily with food for eight weeks. People using Epclusa take one pill once daily with or without food for 12 weeks.

Most people with compensated cirrhosis—meaning they haven't yet developed decompensated cirrhosis, or liver failure—can also use the same regimens. Cirrhosis status can be determined using noninvasive blood tests or liver imaging (FibroScan); a liver biopsy is usually not necessary.

Other treatment options require genotypic testing. Previously untreated people with HCV genotypes 1, 4, 5 or 6 who have no cirrhosis or compensated cirrhosis can use Harvoni (sofosbuvir/ledipasvir) for 12 weeks. Some people with genotypes 1 or 4 may be eligible to use Zepatier (grazoprevir/elbasvir) for 12 weeks.

Only Mavyret or Epclusa are recommended for people with HCV genotypes 2 or 3. However, those with genotype 3 who have a specific drug-resistance mutation shouldn't use Epclusa alone; they can either add ribavirin or use Vosevi (sofosbuvir/velpatasvir/voxilaprevir).

Treatment decisions are more complicated for people who were previously treated for hepatitis C. In many cases, the Vosevi three-drug combination pill, Mavyret plus Sovaldi (sofosbuvir) and ribavirin or a longer course of treatment will be effective.

People living with HIV can usually be treated with the same regimens. However, it is important to check that antiretroviral drugs and hepatitis C medications won't interact with one another, which could lead to worse side effects.

Studies show that children with hepatitis C respond well to Mavyret, Epclusa or Harvoni, and they can be treated using weight-based dosing. Direct-acting antivirals have not been extensively tested in pregnant women. If possible, people should be treated for hepatitis C before trying to become pregnant.

People with decompensated cirrhosis, liver cancer or severe kidney disease as well as liver transplant recipients should work with a specialist, such as a hepatologist or infectious disease doctor, to determine the best treatment strategy.

Modern DAA medications are safe and well tolerated. In clinical trials, the most commonly reported adverse events were headache, fatigue and nausea, mostly mild. Less than 1% of participants in studies of Mavyret or Epclusa stopped treatment because of side effects or other negative health outcomes.

When hepatitis C treatment is working, the virus usually becomes undetectable within several weeks. People are considered cured if they still have an undetectable HCV viral load 12 weeks

after completing treatment, known as a sustained virological response (SVR). If treatment doesn’t work the first time, trying again with a different regimen is usually successful.

Once a person achieves SVR, they are very unlikely to relapse. But having hepatitis C does not lead to immunity, and it’s possible to get the virus again. Successful treatment halts liver disease progression, but some existing liver damage may be permanent. People who have developed cirrhosis should undergo regular monitoring to detect liver cancer at an early, more treatable stage.
