



HEPATITIS C LESSONS • PART 2

Monitoring and Watching Hepatitis C

PURPOSE

To help the people in your group better understand how the hepatitis C virus is affecting their health. By knowing what's happening to their bodies, they can work better with their healthcare providers—whether they decide to take medicine for the virus or not.

FACTS TO HELP REDUCE FUTURE DAMAGE

It's a good idea to talk with the group about certain lifestyle changes that could help reduce additional liver damage.

Lifestyle and dietary changes:

- *Stay away from drugs and alcohol*
- *Eat right (more fruits, vegetables, and fiber; less fatty, fried, sugary or junk foods)*
- *Exercise regularly. Talk to your healthcare provider before starting any exercise program*
- *Stop smoking*

IMPORTANT NOTE!

Be on the lookout for signs that something isn't right. If you have hepatitis C and notice changes, tell your healthcare provider if:

- *You feel differently than you usually do*
- *You are more tired than usual*
- *Your eyes or skin tone look different*
- *If you feel sad a lot*

DISCUSSION TOPICS

What are facts to help reduce future damage?

What tests will your healthcare provider order?

What are liver enzymes and viral loads?

What is a liver biopsy?

How fast does the virus grow?

What are fibrosis and cirrhosis?

Handout: Monitoring and watching hepatitis C

***Here are some sample questions and answers
you can use as you like during your meeting***

What tests do healthcare providers order?

Healthcare providers will often perform blood tests to monitor the virus and the overall health of people with hepatitis C.

These tests measure the amount of hepatitis C virus in the blood (viral load) and the amount of the liver enzymes ALT and AST. (ALT stands for alanine aminotransferase. It is a liver enzyme that helps build and take apart protein. AST stands for aspartate aminotransferase. It is an enzyme that is found in the liver, heart muscle, and red blood cells.)

- *Other blood tests may include:*
 - *A complete blood count (CBC)*
 - *Tests for liver cancer, such as an alpha-fetoprotein test (AFP)*

- *A test to measure blood clotting called prothrombin time (PT)*

Once people with hepatitis C have had a blood test, they can ask their healthcare providers about the results and what they mean. Many even bring a notebook to write down the answers. They can also ask for a copy of the results to keep in a special folder or binder.

When people have their own copies, they can refer to these results whenever they need. The law says they are entitled to the results, but some healthcare providers’ offices may charge a fee for the copying.

NOTES

What are liver enzymes and viral loads?

A high or low amount of the hepatitis C virus in the blood (viral load) does not show the amount of damage to the liver. The same is true for blood tests that show higher liver enzymes, such as ALT and AST. Those are the 2 liver enzymes healthcare providers look for. Measuring these enzymes helps healthcare providers plan for or manage treatment.

The virus and the amount of liver enzymes often change over time for no particular reason. This is because hepatitis C may be unpredictable.

Once you are diagnosed with the hepatitis C virus, the viral load is only measured:

- *When starting treatment*
- *During treatment*
- *12 weeks after the end of treatment*

These tests will help healthcare providers assess whether or not treatment is working.

NOTES

What is a liver biopsy?

Today, a liver biopsy is still the most common way to determine if someone with hepatitis C has liver damage. During a liver biopsy, a healthcare provider puts a needle into your liver and takes out a small sample of liver tissue to examine.

After the biopsy, the liver tissue will be sent to a lab. There, it will be looked at through a microscope, and the results will be put into a report about the health of your liver. Remember to ask when your results will be back from the lab. It can take several days to 2 weeks.

Some healthcare providers are starting to try new ways to get the same information without having to do a biopsy. Some of these tests measure blood chemicals, others take pictures—such as CT scans, X-rays, and ultrasounds—to check on liver disease.

There is a test called a Fibroscan—a machine that sends radio waves through liver to measure the health of the liver. Some medical providers are using this test along with certain liver enzyme tests to replace the liver biopsy.

For now, though, the liver biopsy is still the most common test.

NOTES

How fast does the virus grow?

The hepatitis C virus is constantly making copies of itself. This is called viral replication (or growth). Hepatitis C has an extremely high replication rate.

It is estimated that the hepatitis C virus makes approximately 1 trillion copies of itself each day in a single person infected with hepatitis C.

NOTES

What are fibrosis and cirrhosis?

The presence of hepatitis C in the liver causes inflammation (swelling). Over time, this constant swelling causes a buildup of dead cells in the liver that hardens and thickens the liver (scarring). This scarring is called fibrosis.

The way to measure fibrosis is by having a liver biopsy or a Fibroscan. There are several systems for rating how much fibrosis there is in the liver. Different labs use different measurements. But for all of the rating systems, the higher the number, the worse the damage:

- **Stage 0:** *No scarring*
- **Stage 1:** *A small amount of scarring*
- **Stage 2:** *A little more scarring*
- **Stage 3:** *A lot of scarring*

- **Stage 4:** *A large part of the liver is scarred (Cirrhosis)*

If you have a liver biopsy or a Fibroscan, ask your healthcare provider what stage of fibrosis your liver has.

The worst stage is cirrhosis. It causes the liver to shrink and harden. Cirrhosis can slow blood flow to the liver, which can cause the liver to stop working.

There is no way of knowing exactly who is going to get cirrhosis. It does not happen right away. In fact, some people who have cirrhosis for a long period may not show any signs of it. But people with hepatitis C need to talk to their healthcare provider about cirrhosis because it can do serious damage, and the virus can start damaging the liver without any symptoms.

NOTES

Cirrhosis

There are 2 different stages of cirrhosis:

- Compensated cirrhosis *means that the liver has a large amount of scarring (dead tissue), but can still function. People with compensated cirrhosis may show few signs of the disease. In fact, a person may live many years with cirrhosis without being aware that his or her liver is scarred*
 - Decompensated cirrhosis *means that the liver has a lot of scarring (dead tissue), which keeps the blood it needs from flowing through it. As a result, the liver is unable to work like it's supposed to. Compensated cirrhosis can become decompensated in a short period of time, so it is important to monitor the liver carefully*
- *Too much fluid in the abdomen, or belly (ascites)*
 - *Bleeding (internal bleeding, such as bleeding in the esophagus, or food pipe)*
 - *Vomiting*
 - *Dark urine (pee) or not being able to urinate at all*
 - *A yellow coloring in the skin and eyes (jaundice)*
 - *Feeling confused*
 - *Dark, tarry bowel movements*
 - *Easy bruising of the skin*
 - *High blood pressure in branches of the blood vein called the portal vein, which brings blood from the intestine to the liver (portal hypertension). Cirrhosis is the leading cause of portal hypertension in Western countries*

You can see the signs of decompensated cirrhosis. Some of these symptoms may include:

Another serious complication of cirrhosis is liver cancer.

Does drinking alcohol cause liver disease?

Alcoholic liver disease is one of the most common types of liver disease in the United States. Since alcohol can speed up cirrhosis, people with

hepatitis C should avoid it. This means everything from wine and beer to hard liquor.

NOTES

What is Fatty Liver?

Fatty liver (also called *fatty liver disease* or *steatosis*) is when there is too much fat in the liver cells. It is the most common type of liver disease in the United States.

Drinking too much alcohol is one cause of fatty liver. But it can also happen to people who hardly ever drink. People have a greater chance of getting fatty liver if they:

- *Are overweight*
- *Have too much fat (cholesterol) in their diet*
- *Don't exercise enough*

The amount of fat in the liver might go down when overweight people lose weight, when a diabetic's blood sugar is under control, or when levels of cholesterol are lowered.

- *Have diabetes*

People with hepatitis C are more likely to have fatty liver than those without hepatitis C. That's why it's so important to follow a healthy diet.

NOTES

Can hepatitis C hurt anything else besides the liver?

The main target of the hepatitis C virus is the liver. But when the virus gets in your bloodstream, it can also cause health problems in other parts of your body.

Some people notice joint and muscle pain, different skin conditions, dry eyes and mouth, or itching. But these problems are not that common, and hepatitis C affects everyone differently.

NOTES

Review Points

1. It is important to have your hepatitis C monitored.
2. Work closely with your healthcare provider.
3. Do what is necessary to avoid more damage to your liver. This includes:
 - *Stop drinking alcohol and taking drugs*
 - *If you can't do it on your own, ask your healthcare provider or a counselor for help)*
 - *Eat right (more fruits, vegetables, and fiber; less sugar and fatty, fried, or junk foods)*
 - *Exercise regularly. Talk to your healthcare provider before starting any exercise program*
 - *Stop Smoking*

Suggested Reading:

An Overview of HCV Diagnostic Tests

www.hcvadvocate.org/hepatitis/factsheets_pdf/diagnostic.pdf