

## LIVER BIOPSY - THE FACTS

Source: Hepatitis C Foundation Handout

Abnormal liver function tests do suggest chronic disease, but there is no correlation between liver function tests and the severity of the disease. A liver biopsy is the BEST way to tell what damage has been done to your liver because of the hepatitis virus. Liver damage can occur in symptomatic as well as asymptomatic patients. Damaged liver cells will impair the function of the liver.

### THE BIOPSY

A liver biopsy is a diagnostic procedure that is used to obtain a small amount of liver tissue. It will then be examined under a microscope by a pathologist to determine if any liver damage has occurred. The liver biopsy will indicate if the liver is scarred (scar tissue is beginning to replace functioning liver cells), if inflammation (cellular infiltration and swelling) is present, or if necrosis (dead liver cells) are present. When the liver becomes permanently injured the condition is called cirrhosis. How is it performed? A liver biopsy is performed by a specialist at the hospital. Some hospitals keep you overnight while others keep you for up to eight hours. It all depends on where you are having yours done. Both ways

are acceptable. Your physician will determine the best location on your liver for this tissue to be taken. You will lie down on your side with your right hand under your head. You will be told to remain as still as possible during the procedure. The location will be cleaned with an antiseptic. The physician will insert a needle full of anesthetic to numb the area. You may feel mild pain as a result of the anesthetic. When the area is completely numb the the specialist will insert the biopsy needle into your liver, taking a piece. You may experience some pain when the needle is inserted. You will be told to hold your breathe while the needle is in your body. The needle is then taken out after about one second. You will be told to breathe normally.

A bandage will be placed over the biopsy site. Your vital signs will be closely monitored while in the hospital. You will remain on your right side for several hours to help stop bleeding. You may experience pain for several hours following this procedure. Ask for pain medication if needed. You should rest for the next 24 hours.

Possible complications: Possible complications from the biopsy include

tenderness, rigidity and bleeding at the biopsy site. Be alert for symptoms of a collapsed lung, such as labored breathing or persistent shoulder or chest pain. You should notify your doctor immediately if you are experiencing any of the above.

Risks: There are minimal risks involved when having a biopsy. The primary risk involved is bleeding from the biopsy site. This only occurs in 1% of patients. Other risks may include puncturing of other internal organs.

This rarely occurs. The risk of death from a liver biopsy is less than .1%.

A BIOPSY SHOULD NOT BE DONE IF YOU HAVE TAKEN ASPIRIN PRODUCT 5-7 DAYS PRIOR TO PROCEDURE.

A BIOPSY SHOULD NOT BE DONE IF YOUR HEMOGLOBIN IS BELOW 9-10 GRAMS/dl.

A BIOPSY SHOULD NOT BE DONE IF YOUR PROTHROMBIN TIME INR IS ABOVE 1.4.

A BIOPSY SHOULD NOT BE DONE ON PATIENTS WITH BLEEDING DISORDERS UNLESS THEY ARE TRANSFUSED WITH CLOTTING FACTOR PRIOR TO THE BIOPSY.

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Source: Teaching Patients With Chronic Conditions

Springhouse Corp, Springhouse, Penn, 1992

**PREPARING FOR A LIVER BIOPSY**

Patient-Teaching Aid

BEFORE THE TEST:

- \* Don't eat or drink anything 4 to 8 hours before the test, or as your doctor orders.
- \* Expect to have a blood test to measure your blood's clotting ability and other factors.
- \* Just before the test, be sure to empty your bladder.

#### THE PROCEDURE

- \* During the test, you will lie on your back with your right hand under your head. You will need to remain in this position and keep as still as you can. The doctor will drape and cleanse the area on your abdomen. He will then inject a local anesthetic, which may sting and cause brief discomfort.
- \* When you are told, hold your breath and lie still as possible as the doctor inserts the biopsy needle into the liver. Be assured that the needle will remain in your liver for only about 1 second. The needle may cause a sensation of pressure and some discomfort in your right upper back.
- \* After the needle is withdrawn, resume normal breathing. The doctor will apply pressure to the biopsy site to stop any bleeding. Then he will apply a pressure bandage.

#### AFTER THE TEST

\* You will be told to lie on your right side for 2 hours, with a small pillow tucked under your side. For the next 24 hours, you should rest in bed.

Your vital signs will be checked periodically.

\* Tell your doctor or nurse right away if you experience any problems, including chest pain, persistent shoulder pain, or difficulty breathing.

\* You can resume your normal diet.

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Information gathered from past biopsys have reported that some doctors will perform a liver biopsy without the use of anesthetic, while others use it. Some doctors will use a scoping devise/Ultrasound to help guide the biopsy needle. Some biopsy patients report no pain, some with mild pain or pressure, and others experience much discomfort during and after.

**ALL BIOPSYS ARE NOT THE SAME!**

(Even different biopsys done on the same patient!)

Best advise is to discuss the biopsy procedure with your doctor BEFORE the procedure. Ask about the different options offered. Bring in a list of questions for your doctor-or just copy this paper, and bring it in to help you discuss your biopsy.

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**INTERPRETING BIOPSY RESULTS**

Book Source: "Living With Hepatitis C"-A Survivor's Guide

Dr. Gregory T. Everson, MD & Hedy Weinberg

Hatherleigh Press, New York, 1998

\*STAGE I- is characterized by inflammation without the development of any scar tissue.

\*STATE II- features include inflammation with early scarring (fibrosis) in one zone (portal) of the liver.

\*STATE III- shows bridging the fibrosis between adjacent portal tracts.

\*STATE IV- is cirrhosis (advanced scarring with loss of normal liver architecture).

### Later Warning Signs of Cirrhosis

What does cirrhosis mean? Cirrhosis simply means the hardening of the liver due to a buildup of scar tissue. Patients who have early-stage cirrhosis may

not have any symptoms. Late stage cirrhosis is characterized by complications (some of which are life threatening) and limited survival.

Patients with any or all of the following signs may be potential candidates for a liver transplant:

\* Yellowing of the skin and whites of the eyes: jaundice.

\* Fluid buildup: ascites.

- \* Bleeding: variceal hemorrhage.
- \* Mental confusion: portal-systemic encephalopathy.
- \* Weight loss.
- \* Thinning of bones (osteoporosis) and fractures: metabolic bone diseases.
- \* Blood clotting problems: coagulopathy.
- \* Itching: pruritus.