

Liver Biopsy

The liver is the largest organ in the body. It is found high in the right upper abdomen, behind the ribs. The liver is remarkable, quietly making many proteins, eliminating waste products, and participating in the general metabolism and nutrition of the body. It even has the power to regenerate itself. However, there are many different problems that can occur in the liver and some can cause permanent damage. These conditions include virus infections, reactions to drugs or alcohol, tumors, hereditary conditions, and problems with the body's immune system.

Evaluating a Liver Condition

The physician will always take a medical history and perform a physical exam. Blood studies, known as liver function tests (LFT), give an overview of the health of the liver. If LFT results are persistently abnormal, the physician will then perform additional medical studies to determine the exact cause of the problem.

Finding the cause is important because there are now effective treatments for many liver disorders. Finally, the physician will want to know not only the specific cause of the problem, but also how severe the condition may be. The liver biopsy helps answer these questions.

What is a Biopsy?

A biopsy is a tiny sample of body tissue -- in this case, liver tissue. The tissue is prepared and stained in a laboratory, so the physician can view it under a microscope. This usually helps the physician make a specific diagnosis and determine the extent and seriousness of the condition. It is vital information for determining treatment.

The Procedure

The liver biopsy is usually performed on an outpatient basis. A mild sedative may be given to the patient prior to the procedure. Sometimes, an ultrasound or echo machine is used to identify the best location to make the biopsy. Usually, the physician can make this determination simply by examination. The patient lies quietly on the back or slightly to the left side. That area of the skin where the biopsy will be done is carefully cleaned. Then, a local anesthetic agent is used to numb the skin and tissue below. A specially designed thin needle is inserted through the skin. At this point, the physician will tell the patient how to breathe. The needle is advanced into and out of the liver. This takes only 1 or 2 seconds. A slender core of tissue is removed with the needle, and is then processed through the laboratory. The entire procedure from start to finish lasts only 15 to 20 minutes.

Recovery

The patient is kept at rest for several hours following the exam. Medical personnel check the heart rate and blood pressure during this time. There may be some discomfort in the chest or shoulder, however, this is usually temporary. Medication is available for this

discomfort, if needed. Before being discharged, the patient is given instructions about returning to normal activities and about eating. Activity is usually restricted for a day or so after the biopsy. However, the procedure does not require a long recovery period.

Complications

In most instances, a liver biopsy is obtained quickly with no problems. As noted, there is occasionally some fleeting discomfort in the right side or shoulder. Internal bleeding can sometimes occur, as can a leak of bile from the liver or gallbladder. These problems are rare and can usually be handled without the need for surgery.

Summary

A liver biopsy is a simple, rapid method of obtaining a sample of liver for analysis. It provides important information for evaluating and treating liver disorders. While some complications can occur, they are unusual. The benefits of the exam always outweigh the risk. Early, specific, and effective therapy can often prevent irreversible liver damage.