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# Liver Biopsy

## What is a liver biopsy?

A liver biopsy is when a small sample of tissue is collected from the liver. The sample is examined under a microscope to find out if there is a problem with the liver.

## Why does my child need a liver biopsy?

Blood tests can provide a lot of information about the liver. In addition, imaging of the liver with ultrasound, a CT scan, or magnetic resonance imaging (MRI) can provide information about the causes of liver disease. Sometimes, however, a tiny sample of the liver is needed to provide important information about the cause of liver disease or the extent of liver damage.

The most common reasons to do a liver biopsy in children are:

- Liver-related jaundice (yellow skin and yellow eyes)
- Liver inflammation (hepatitis)
- Abnormal liver-related blood tests
- A liver that has grown larger than its usual size
- To evaluate and monitor patients who have received liver transplants

## How do I prepare my child for a liver biopsy?

- *Blood test* – Your doctor will order blood tests to check that your child's blood can clot normally. This will help minimize complications from the procedure, such as bleeding.
- *Medications* – Certain medications (including aspirin or ibuprofen) increase bleeding risk, so your child should not take these medications for several days before the biopsy, unless advised differently by your doctor.
- *Fasting* – Your child will not be able to eat for several hours before the procedure.
- *Reassurance* – Being confident yourself can help to reassure your child about the procedure. Do not hesitate to ask your doctor any questions you have about the

procedure, the doctor's experience with the procedure, and the number of procedures done at the center every year.

## How is the liver biopsy done?

Liver biopsies are usually performed either by gastroenterologists or by interventional radiologists. Children are sedated or given anesthesia during the procedure, so they are asleep and comfortable.

An ultrasound is usually done first to help the doctor find the best place to insert the needle into the liver to collect a sample. After sedation or anesthesia is given to the child, the skin is cleansed and a needle is inserted through the skin and into the liver. Quickly pulling out the needle removes a tiny piece of the liver, which will be looked at closely under a microscope. After the procedure, the child is observed closely until it is safe for you to take the child home.

Liver biopsies are quick procedures, although the sedation and anesthesia take time.

## Will it leave a scar?

The procedure leaves a very tiny scar.

## What are the risks of a liver biopsy?

Liver needle biopsy is generally considered a safe procedure, but small risks include:

- Bleeding from the site of the biopsy or internally
- Redness, soreness, and/or swelling at the biopsy site
- Sedation/anesthesia-related issues, such as fatigue or vomiting
- Post-operative fevers

More serious risks are very rare and can include more severe bleeding requiring transfusion or injury to another organ, such as the lung or gallbladder.

## Can my child go home after the procedure?

Your child will be observed for a few hours after the procedure to make sure there is no bleeding, pain, fever, or vomiting. Then you and your child will be discharged home. The time of discharge differs according to the age and health of the child and the reason for the biopsy, but it is usually 6–24 hours. The results from the biopsy are usually available within 7 days, and often sooner.

## What should I watch out for?

After discharge, you should call the doctor or go to the emergency department if any of the following occur:

- Persistent abdominal or chest pain
- Difficulty breathing
- Vomiting
- Pale skin, weakness, or dizziness
- Passage of tarry black stools

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**IMPORTANT REMINDER:** This information from the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is intended only to provide general educational information as a definitive basis for diagnosis or treatment in any particular case. It is very important that you consult your doctor about your specific condition.

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