



Liver biopsy

What is a liver biopsy?

A liver biopsy is a procedure that involves obtaining a small piece of liver tissue, which is then analysed in the laboratory. It may be recommended to help establish a diagnosis or severity of injury from a disease that has already been diagnosed. Liver biopsies are most commonly performed "percutaneously" (through the skin). As a result, most patients can go home within four hours of the procedure. The suggestion by a doctor that you should have a biopsy is bound to produce anxiety in most people. Every effort will be made to make your biopsy as comfortable as possible. Most often results will be available in 7 days.

Why is liver biopsy performed? A biopsy is recommended when the results would influence a management decision.

Who performs the liver biopsy? A biopsy is performed by a radiologist under ultrasound to minimise the risks.

What preparations are done before liver biopsy?

Blood tests to test your clotting will be performed. You should not take medications that can increase the risk of bleeding. These include Aspirin, anti-inflammatory drugs NSAIDS, blood thinning medications such as Warfarin (Coumadin), certain medications for people with heart Dipyridamole [Persantin], Ticlopidine [Ticlid], and Clopidogrel [Plavix]). Your doctor can recommend when and how you can interrupt taking these drugs so that your biopsy can be performed safely.

On the day of the biopsy you will be instructed not to have breakfast. You will need to arrange to have someone accompany you to your home after the biopsy since you may receive medications that will temporarily impair your ability to drive. A friend or family member can also help pass the time during the few hours of observation following the biopsy.

What is the procedure like?

You may be given sedative medication prior to the procedure to minimise discomfort and anxiety, because your cooperation is needed during the liver biopsy, only small amounts of medication will be used. Your skin will be cleansed with alcohol solution and the area will be draped with sterile towels. A local anaesthetic will be injected into the skin; you will feel this as a burning sensation. A tiny incision will be made into the skin so that the needle for biopsy will pass through easily. At the time of the biopsy it is very important for you to cooperate with breathing instructions. The biopsy itself only takes one second, during which the biopsy needle is passed quickly in and out of the liver, and a clicking sound may be heard when the biopsy needle is deployed. A small bandage will be applied to the biopsy site. You will be asked to lie on your right side for two hours to place pressure against the biopsy site to decrease the possibility of bleeding.

What are possible complications? A biopsy is a very safe procedure

- ❑ **Discomfort** 25 % of patients experience discomfort at the biopsy site that usually responds to panadol
- ❑ **Low blood pressure** A "vasovagal" reaction is similar to what occurs when a person faints
- ❑ **Bleeding** — Significant bleeding after a liver biopsy occurs in 1 in 1,000. Bleeding usually becomes apparent within three to four hours. If bleeding occurs, you may require a transfusion. The bleeding often stops on its own. Surgery or angiography (a procedure in which the bleeding site is identified and blocked) may be required if the bleeding is severe or does not stop on its own.
- ❑ **Bile peritonitis** A bile leak causing peritonitis occurs in less than 1 in 1,000 biopsies.
- ❑ **Perforation:** accidental piercing of other organs such as the lungs, kidney, small intestine, and gallbladder. This is rare under radiology control perhaps 1:1000 risk
- ❑ **Reactions to medications** An allergic reaction is possible but serious reactions are uncommon.
- ❑ **Death** 1:10,000 may die from this procedure though this is very rare and needs to be weighed up against the risks of doing nothing.

Are there any restrictions after the biopsy?

You should plan to take it easy for the next 5-7 days. In general you will be instructed to restrict heavy lifting for a week, avoid blood thinning medication for several days, and to call a doctor with any concerning symptoms such as:

- Severe pain at the biopsy site, abdominal pain or severe shoulder pain
- Shortness of breath or Chest pain
- Bleeding from the biopsy site

Results can take up to 10 days BEFORE a becoming available