



# Living Liver Donation: Medical Toolkit

## CHAPTER • 5

## Living liver donation and biopsy

### What is a liver biopsy?

A liver biopsy is a procedure where a doctor removes a small piece of liver tissue to look at it under a microscope. To get the liver tissue, the doctor either inserts a thin needle into a person's belly area (abdomen) or through a vein in their neck.

Usually, the living donor team can find out a person's liver health by giving them blood tests and imaging tests such as an ultrasound, CT scan, or MRI. However, sometimes they need more information and will do a liver biopsy to:

- Find out how much fat is in the liver, which can affect how well the liver will work after a transplant
- Look for inflammation (swelling) or scarring of the liver
- Rule out early signs of liver disease

### Why would a potential donor need a liver biopsy?

Different transplant centers have different reasons for doing a liver biopsy, such as:

- A donor being very overweight
- Imaging tests show a large amount of fat in their liver
- Blood tests or other lab tests show unusual results
- Strong family history of autoimmune disorders such as primary biliary cirrhosis (PBC), primary sclerosing cholangitis (PSC), autoimmune hepatitis (AIH)
- Genetic tests show they may have a disease that can affect liver function, such as alpha-1-antitrypsin deficiency or hemochromatosis

In the US, the most common cause of a liver condition is Non-Alcoholic Fatty Liver Disease (NAFLD), where the liver contains fat and can get inflamed (swells). To learn more about NAFLD, see Chapter 3 on liver donation for people with obesity.

### What are the risks and benefits of a liver biopsy?

#### Risks of a liver biopsy include:

- Mild pain or discomfort in the area where the liver biopsy was taken – this is the most common problem
- Rarely, bleeding inside the body can happen in the first several hours after the procedure – before a biopsy, donors should tell the transplant team all the medicines and supplements they take so they know if their blood may not clot well

A liver biopsy only gets a tiny liver sample and so may not give an accurate picture of the entire liver. IF this happens your doctor will talk to you about next steps as they can vary.

#### Benefits of a liver biopsy include:

- Helping the donor team decide if liver donation would be safe and work well for the potential donor and their recipient

## REFERENCES

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*Note: This information is the opinion of the Living Donor Community of Practice (LDCOP) of the American Society of Transplantation. The LDCOP is a group of health care professionals and researchers who specialize in living donation. The LDCOP's recommendations are meant to offer you helpful information, but you may find opinions from other groups or organizations that are helpful to you, too.*