

# Transjugular liver biopsy (TJLB)

Radiology

## What is the aim of this leaflet?

The aim of this leaflet is to explain the procedure for patients undergoing a transjugular liver biopsy. This leaflet is not meant to replace informed discussion between you and your doctor, but can act as a starting point for outlining risks and benefits.

## What is a transjugular liver biopsy?

A liver biopsy is a procedure that involves taking a tiny specimen of the liver for examination under a microscope. In most cases, a liver biopsy is taken through the skin by passing a fine needle through into the liver. A transjugular liver biopsy (TJLB) is an alternative way of obtaining the liver specimen by passing the needle into the vein in the neck (jugular vein) and then through the liver veins to obtain a sample of the liver. This method is used in patients who have abnormal clotting of the blood or fluid collecting within the abdomen. The technique is used to reduce the risk of bleeding after the biopsy. Any bleeding will go back into the vein which the biopsy was taken from and so go back into your own body.

## Who has made the decision?

The physician in charge of your care has made the decision for you to have this procedure. The information gained from the biopsy will help the doctors in the treatment of your condition. Although this decision has been made in your best interests, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctor, you no longer want the procedure, you can decide against it.

## Consent

We must seek your consent for any treatment or procedure beforehand. A written consent will be obtained from yourself by a doctor to give permission to have the procedure done. Your doctor will explain the risks, benefits and alternatives where relevant before you sign the consent. A referral will be made and your appointment will be arranged. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.

## What are the benefits of having this procedure?

- The procedure is minimally invasive meaning recovery time is quicker than a surgical biopsy procedure

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

- Transjugular liver biopsies are safer for patients who experience issues with blood clotting

## What are the risks of having the procedure?

The risks are low and will be discussed during consent. You will also have the opportunity to discuss any concerns before your procedure.

## Are there any alternative treatments and what if I decide not to have it done?

The choice about which treatment is best for you will be made together with your doctor. This will be based on the risks and benefits of the treatment and your individual circumstances. The doctor will have explained the different treatment options to you and what will happen if you decide not to have any treatment at all.

## Risks

- Bruising around the puncture site
- The overall risk of a problem requiring further treatment is low (1–2%)
- The most common risk is bleeding after the biopsy. However, a transjugular liver biopsy has a lower risk of bleeding than a conventional liver biopsy taken through the side of the abdomen
- Occasionally a diagnosis cannot be reached on the sample provided so the procedure may have to be repeated to obtain a diagnostic sample.

### Radiation:

- Ionising radiation may cause cancer many years or decades after the exposure. We are all at risk of developing cancer during our lifetime. 50% of the population is likely to develop one of the many forms of cancer at some stage during our lifetime. It has been estimated that undergoing this procedure may increase the chances of this happening to you, by about 0.1 %. The requesting doctor and the doctor that will be performing your examination feel that the benefit of having the test or treatment outweighs the risk from the exposure to radiation
- If you have further questions about the risk of exposure to radiation, please talk to your doctor during consent.  
**Please contact the X-ray Department as soon as you receive this appointment if you think you may be pregnant**

### Contrast agent:

- The "dye" that is used can have side effects for a minority of patients
- 3 in 100 patients experience nausea and hot flushes
- 4 in 10,000 may have more serious effects including breathing difficulties
- If a side effect does occur the doctors, nurses and radiographers are trained to deal with it.

## Are you required to make any special preparations?

This procedure is usually carried out as an inpatient procedure under local anaesthetic.

- You can eat and drink as normal unless a doctor or nurse has specifically said otherwise
- If you have any allergies or have previously had a reaction to the dye (contrast agent), you must tell the radiology staff before you have the procedure.

If you are taking the following medication and the doctor has not discussed this during consent, please contact the X-ray department when you receive this information:

- Acenocoumarol, Apixaban, Aspirin, Bivalirudin, Dabigatran, Dalteparin, Danaparoid, Dipyridamole, Edoxaban, Enoxoparin [Clexane], Fondaparinuxm, Heparin, Phenindione, Tinzaparin, Warfarin.

## Where will the procedure take place?

The procedure will take place in the angiography suite; this is located within the radiology department. This is similar to an operating theatre in which specialised X-ray equipment has been installed.

If you are on a different ward, the angiography suite will liaise with your ward nurse and porters to arrange transport to your procedure.

## Who will do the procedure?

An interventional radiologist will perform the procedure. They have special expertise in interpreting the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

## What happens during the procedure?

The procedure is performed using local anaesthetic (a medication used to numb an area of the body to reduce pain). Sedation (a medication used to produce a state of calm or sleep) may be used if required.

You will be asked to get undressed and put on a hospital gown. Observations of your heart rate and blood pressure will be taken during and after the procedure. A team of nurses and radiographers will look after you and assist the radiologist during the procedure; this is routine.

The skin at the side of the neck will be swabbed with antiseptic liquid and covered with sterile drapes. Local anaesthetic is injected at the procedure site (usually in the right side of your neck). This may sting for a few seconds but will then go numb.

The interventional radiologist uses an ultrasound probe and X-rays to allow accurate access into the vein through a minute incision. The interventional radiologist places various catheters and wires up or down the vessel into the liver to guide the biopsy needle. You may be able to feel this but there should be no pain. The radiologist will insert a specifically designed biopsy needle down into the liver and take a sample of the abnormal tissue. Usually, two to three biopsy specimens are taken. All tubes will be removed at the end of the procedure, and pressure applied to the entry point to stop the bleeding.

## Will it hurt?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. When the catheter is placed in the liver, you may get a dull ache in the right shoulder. This will go away once the tube has been removed. Some people feel a sharp pinch inside the abdomen as the biopsy is taken, but this will only last a couple of seconds. If sedation is required, this will have been discussed with you at consent, it will be given before the procedure begins.

## How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the radiology department for about two hours.

## What happens afterwards?

- You will return to the ward
- The nurse on the ward will take your pulse and blood pressure to make sure that there are no problems
- They will also look at the skin entry point to make sure there is no bleeding from it
- You will need bed rest for a few hours, you will then be able to sit up and walk around if there are no complications.

## Trainee doctors

A radiology trainee (qualified experienced doctors training in radiology) or occasionally a student may be present during the examination. If you would prefer them not to attend, please let a member of radiology staff know.

## How to contact us

If you have any personal access needs, require wheelchair access and wish to speak to a member of staff for further information please contact the Interventional Radiology department on (01902) 307999 Ext 6344 between 9.00am and 5.00pm

### **Angiography Suite/Interventional Radiology**

Second floor Radiology A2

New Cross Hospital

Wolverhampton

West Midlands

WV10 0QP

### **Patient Advice and Liaison Service**

New Cross Hospital

01902 695362

Email: [rwh-tr.pals@nhs.net](mailto:rwh-tr.pals@nhs.net)

## Further information

Further information about your examination is available at [https://www.rcr.ac.uk/sites/default/files/docs/patients/.../TJLBx\\_BSIR\\_PIL\\_FINAL.doc](https://www.rcr.ac.uk/sites/default/files/docs/patients/.../TJLBx_BSIR_PIL_FINAL.doc)

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。