Having a transjugular liver biopsy

Information for patients
This sheet answers common questions about having a transjugular liver biopsy. If you would like further information, or have any particular worries, please do not hesitate to ask your nurse or doctor.

In all cases, a doctor will explain the transjugular liver biopsy to you and answer any questions you may have.

**What is a transjugular liver biopsy?**
A transjugular liver biopsy is a medical procedure that involves taking a small sample of tissue from your liver for examination under a microscope. This method of liver biopsy is used in patients who have abnormal clotting of the blood or fluid within the abdomen. This technique reduces the risk of bleeding after the biopsy.

**How is a transjugular liver biopsy performed?**
A specially trained doctor (either an interventional radiologist or a hepatologist) will perform the biopsy. They have special expertise in using imaging for diagnosis, to perform procedures and administer treatment.

The procedure involves passing a small tube (catheter) through the vein in the right side of the neck (jugular vein) and using x-ray guidance to pass a small needle through this to the liver.

The biopsies are taken through this tube in the neck.
There is no need for a large cut to be made to the skin as only a narrow tube is used.

The procedure is usually carried out as a day case under local anaesthetic.

**The benefits of having a transjugular liver biopsy**
The benefit of a liver biopsy is that it is a safe and quick procedure, which will provide important information about your condition.

This information cannot be obtained through scans or blood tests. Patients who have had a previous liver transplant may undergo a routine (‘protocol’) biopsy to assess the condition of the liver.

The simplest way to make a diagnosis and guide treatment is to examine a sample of liver tissue under the microscope. A liver biopsy is therefore sometimes the only way for your doctor to get the information needed to make a correct diagnosis and treat your illness.

**Risks and side-effects**
A transjugular liver biopsy is a safe medical procedure with a less than 1% risk of serious complication:

- There is a small risk of internal bleeding after the biopsy. If you take aspirin or warfarin, or if you have a bleeding disorder, there may be a greater
chance of bleeding from the biopsy site. You will stay in hospital for several hours after the procedure so that we can monitor you.

- A small amount of x-ray dye (contrast) is used to confirm position in the correct vein. Some people may develop a reaction to this dye although the risk is very small. The team looking after you are trained to recognise and treat this potential reaction.

**Before your procedure**

You will need to have a blood test about a week before the biopsy. The test lets us check that your blood clotting is normal. If it is abnormal there is an increased risk of bleeding after the procedure. You may be given special blood transfusions to correct this. Please discuss any concerns with your doctor.

**For morning admissions, please do not eat or drink anything from 12 midnight** – you can drink water for up to two hours before the procedure.

**For afternoon admissions, you may eat a light breakfast but please do not eat anything after 6am** – you can drink water for up to two hours before the procedure.

If you are taking warfarin or any other blood thinning medication, please call the interventional radiology
department at the Royal Free Hospital on 020 7433 8772 for further advice.

Take your medicines as normal unless your doctor or nurse tells you not to.

If you have any allergies or have previously had a reaction to x-ray dye (contrast) you must tell the radiology staff before you have the test.

You may receive a sedative to relieve anxiety.

What will happen on the day?
The procedure will take place in the interventional radiology department. You should expect the procedure to take about one hour, but the timing will vary as each patient is different.

You will be asked to give written consent before the procedure. We want to involve you in decisions about your care and treatment – please do not hesitate to ask the doctor if you have any questions at all. It is your decision to have the procedure.

You will be shown to a private cubicle where you will be asked to change into a hospital gown. A small plastic tube (cannula) will be placed into a vein in your arm. This is so that we can give you a sedative during the procedure should you need it.
A transjugular liver biopsy is performed using local anaesthetic and sometimes sedation. The skin at the side of the neck will be cleaned with antiseptic and made numb. Once numb, a small tube (catheter) is inserted into the vein in the neck. An x-ray machine is used to guide the catheter into the vein in the liver. The tube then guides the needle into the liver. Usually three biopsy specimens are taken.

The examination should be pain free. Occasionally when a biopsy is being taken it may hurt. **If you experience any discomfort, please inform the nurse and pain relief can be given to you.**

**After your transjugular liver biopsy**

You will be taken back to a ward where you will need to stay in bed as instructed by the nursing staff. They will monitor you at regular intervals.

A light refreshment will be provided. If you have any dietary requirements, please inform us in advance and bring a light refreshment with you on the day.

Once you have been observed for a satisfactory length of time you will be discharged and able to go home the same day. The length of time we will observe you for will vary depending on your medical condition, the use of sedation and the difficulty of the procedure.
Someone will need to take you home by car or taxi, especially if you have received sedatives as the effect of these can last for 24 hours. Public transport is not recommended as it is not safe should you feel unwell.

What you should do when you get home
- Rest for a minimum of 24 hours and if possible, do not go to work on the day after the procedure.
- It is recommended that someone stays with you overnight, particularly if you had any sedation.
- You should not do any strenuous activity or heavy lifting for at least a week following the procedure.
- Wait 24 hours before having a shower and 48 hours before having a bath.
- You should eat and drink as normal.
- Take your usual pain relief, as prescribed, if necessary.
- Continue with your normal medication as prescribed. If you take anticoagulants, restarting these will be discussed with you before discharge.

When will you receive your results?
The results will take about three to five working days. You will need to make an appointment with your referring doctor for the results.

What to do if you have a problem at home
There may be some bruising at the puncture site (the site at which the catheter is inserted) – this is usually not serious.
Bleeding or swelling is rare but if it does happen, lie down and apply pressure directly on the site for ten minutes. If the bleeding or swelling continues after ten minutes go to your nearest accident and emergency (A&E) department.

Parking
Please be aware that a very limited number of parking spaces are available at the hospital. Please visit the Royal Free London website for further information at: royalfree.nhs.uk/contact-us/parking-at-our-hospitals.

Do you have any further questions? Please use this section to make notes.

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please ask a member of staff.

If you require a full list of references for this leaflet please email: rf.communications@nhs.net.

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