

Information about

# Kidney Transplant Biopsy



## **Introduction**

This leaflet tells you about having a kidney transplant biopsy. Please read it as well as talking to your doctor.

## **What is a kidney transplant biopsy?**

A kidney or renal transplant biopsy means removing a very small sample (about half the size of a matchstick) of the kidney transplant through the skin using a special needle. We can then test the biopsy or sample under a microscope to find out what is wrong with the transplant kidney.

## **Why would you need to have a kidney transplant biopsy?**

A biopsy of the kidney transplant is usually done because blood and urine tests have shown that the transplant is not working properly. (Usually the creatinine level in the blood has risen or there is more protein than normal in the urine). The biopsy is the best test to look for rejection in the transplant kidney but we can also use it to find other causes of kidney damage such as side effects of anti-rejection drugs.

## **Where is it done?**

We usually carry out the biopsy in the ward, in a special procedure room, or you will go to the X-ray department. It takes about thirty minutes and you will usually have a local anaesthetic which numbs the area and you will be awake. You can eat and drink normally before and after the biopsy is done.

## **How is it done?**

We will ask you to lie on your back. We will clean the skin over your transplant kidney with antiseptic. We inject some local anaesthetic into the skin, which stings a little at first. Once the skin is numb we inject more local anaesthetic around the transplant kidney. Usually the doctor will use an ultrasound scan to find the exact position of the kidney transplant. They will take the biopsy through the skin using a special needle. You should not be aware of any pain from this needle but you may feel a little pressure and hear a clicking sound when the doctor takes the biopsy sample. The doctor may ask to take 2 or 3 biopsy samples. Occasionally it may not be possible to remove a suitable bit of the kidney.

## **What happens afterwards?**

Following the biopsy you will rest in bed for at least 6 hours. Nurses will monitor your blood pressure and pulse frequently at first and then less often. They will check any urine which you pass after the biopsy to check for any bleeding. During this time you should be able to eat and we encourage you to drink plenty of fluids.

If you feel well after the biopsy and have no pain or bleeding you may be able to go home later that day to rest. **Do not drive on day of your procedure, please ask someone to collect you if possible.**

After the biopsy you should avoid exercise for 48 hours and if you develop pain around the transplant kidney or any blood in the urine you should contact the kidney unit straight away for advice.

## **Results**

A provisional result from the biopsy should be available within 24-48 hours but the full report may take longer.

## **What are the risks of a kidney transplant biopsy?**

A kidney transplant biopsy has a small risk of complications. Your doctor has recommended a kidney transplant biopsy because it is felt that the information from the biopsy makes this small risk worthwhile and it is important that you agree with this.

The main risk is that the biopsy needle can damage the kidney transplant or other parts of the body nearby such as the bowel.

The most serious risk from the biopsy is bleeding and you will have a blood test before the biopsy to make sure that your blood clots normally. It is important you tell your doctor if you have any problem with bleeding or bruising or if you are taking tablets that can effect bleeding such as Clopidogrel, Warfarin, Dipyridamole, Apixiban, Riveroxiban, Dabigatran, Edoxaban or similar. You may need to stop these for several days before the biopsy.

It is also important to tell your doctor if you are allergic to antiseptics such as **Iodine**.

In less than 3 out of a thousand biopsies there is more severe bleeding that requires a blood transfusion. In less than 1 in a thousand biopsies an operation is needed to stop the bleeding and this may mean removing the kidney. Although deaths have occurred following complications of biopsies this is extremely rare.

### **What are the benefits of having a kidney transplant biopsy?**

A biopsy could help to find out what is wrong with your transplant kidney and to help decide the correct treatment. It may avoid you being given unnecessary treatment which could have side effects and it may prevent further harm being done to your transplant kidney by being given the wrong treatment.

### **What are the alternatives to a kidney transplant biopsy?**

A biopsy is usually the last test to be done to work out what is wrong with your kidney because the other tests have not provided the answer. Without a biopsy your doctor may not be able to advise the best or correct treatment for you. Your doctor should be able to tell you what changes in treatment could be made for your kidney transplant if you decide not to have a biopsy taken first.

If you agree to have a biopsy we will ask you to sign the hospital's consent form which will also state that you have received information about the procedure and have discussed it with your doctor.

### **If you have any further questions or develop any complications, please contact:**

**The Renal assessment Unit, Queen Elizabeth University Hospital**

- Day ward number: 0141 452 3760 or 3761 (Monday to Friday)
- Renal assessment doctor: 0141 452 3763 (out of hours)
- Renal Ward 4D: 0141 452 2421 (Saturday and Sunday)

(This information sheet has been developed by the Renal Association. It may be incorporated as information within patient consent forms, but should only be used in a format consistent with the policies of the health provider organisation and the NHS.) 06.09.2012.