



**Royal Papworth Hospital**  
NHS Foundation Trust

# Cardiac biopsy

Patient's guide and  
consent form



## Introduction

This guide is for patients who are having a cardiac biopsy. It explains what is involved and any risks associated with the procedure. A cardiac biopsy is a medical procedure to remove small pieces of heart muscle for examination under a microscope. The sample for biopsy is usually obtained from the right pumping chamber of the heart (right ventricle).

## Why might I need a myocardial biopsy?

This procedure is routinely done after heart transplantation to look for signs of rejection.

There may be other reasons for this test. These can include diagnosing myocarditis (inflammation of the heart muscle) or rare types of heart muscle disease such as Amyloidosis or infiltrative heart muscle disease. In some patients a cardiac biopsy is performed to obtain samples to help diagnose tumours.

## Preparation for the procedure

This is usually performed as an outpatient or day case procedure. If you are coming in for an outpatient biopsy we suggest you do not take any diuretic (water tablet) on the morning of the biopsy.

Any anticoagulation (blood-thinning) medications such as Warfarin, Rivaroxaban, Edoxaban, Apixaban or low molecular weight heparin need to be stopped before the procedure. Please contact the Transplant Continuing Care Unit in the week before the procedure for advice.

## What does the procedure involve?

The test is performed in the catheter laboratory and will last approximately 30 minutes or less. The room is a little cold to prevent the equipment from over-heating.

You will need to lie flat on a movable table beneath an X-ray machine. The heart rhythm is monitored throughout the procedure. Local anaesthetic is injected to numb the skin. Using a needle, a small plastic tube (sheath) is inserted into a vein in the neck or occasionally in the groin. Biopsy forceps are

used to remove small pieces of heart muscle under x-ray guidance.

## Are there any risks?

Cardiac biopsy is a low-risk procedure. Complications occur in approximately 1 in 100 patients.

These include:

- Bruising, bleeding, or damage to a blood vessel at the site where the sheath is inserted
- Temporary numbing of nerves at the site where the sheath is inserted
- Puncture to the lung causing collapsed lung (pneumothorax)
- Fainting reactions or low blood pressure
- Temporary disturbances of heart rhythm
- Damage to the tricuspid valve
- Damage to a coronary artery
- Perforation of the wall of the heart or pulmonary artery and cardiac tamponade (fluid build-up around your heart that affects its ability to pump blood effectively)
- Pulmonary embolism
- Very rare risks include infection, blood clots in the neck veins, stroke causing disability and death

For some patients the risks may be different. Please speak to your doctor before the procedure if you have any concerns.

## What happens after the procedure?

When the procedure has been completed a dressing will be applied to the neck or groin area and you will return to the outpatient department or ward. If the procedure is performed from the groin you will need to lie flat for approximately one hour afterwards. The dressing can be removed the next day.

A chest x-ray is routinely performed after a cardiac biopsy.

If the procedure is performed from the groin you will need someone to drive you home. You can resume normal activities the next day.

## **Results**

The result is usually available on the same day or within 24 hours.

## **Research**

Royal Papworth Hospital is a teaching hospital and you may be approached to participate in research.

## **Valuables**

Please do not bring excess jewellery, credit cards or large sums of cash to the hospital.

## **Contact numbers**

For further information please contact:

Transplant Continuing Care Unit  
Tel: 01223 638007



Please affix patient label or complete details below.

Full name:

Hospital number:

NHS number:

DOB:

# Consent 010

## Patient agreement to cardiac biopsy

### Intended procedure/surgery

#### Statement of health professional

(To be filled in by health professional with appropriate knowledge of proposed procedure, as specified in consent policy). I have explained the procedure to the patient. *In particular I have explained:*

#### The intended benefits:

To detect any rejection (after a heart transplant) or diagnose heart muscle disease and to help decide the best treatment course.

#### Significant, unavoidable or frequently occurring risks:

As detailed on page 1 of this booklet.

Specific concerns:

.....  
.....

#### Any extra procedures, which may become necessary during the procedure:

.....  
.....

I have also discussed what the procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient.

#### This procedure will involve:

Local anaesthesia and sometimes sedation.

#### Consultant/Performer/Registered nurse\*

Signed: .....

Date: .....

Name (PRINT): .....

Job title: .....

**Contact details:** If you require further information at a later date please contact the Transplant Continuing Care Unit on 01223 638007

\*Has received further training/delegated responsibility

#### Statement of patient

*Please read the patient information and this form carefully.*

If your treatment has been planned in advance, you should already have your own copy which describes the benefits and risks of the proposed treatment. If not, you will be offered a copy now.

If you have any further questions, do ask - we are here to help you. *You have the right to change your mind at any time, including after you have signed this form.*

- **I understand** what the procedure is and I know why it is being done, including the risks and benefits.
- **I agree** to the procedure or course of treatment described on this form and have read this information leaflet on cardiac biopsy (PI 208) and had the opportunity to ask questions.
- **I agree** to the use of photography for the purpose of diagnosis and treatment and I agree to photographs being used for medical teaching and education.
- **I understand** that you cannot give me a guarantee that a particular person will perform the procedure. The person will, however, have appropriate experience.
- **I understand** that any tissue removed as part of the procedure or treatment may be used for diagnosis, stored or disposed of as appropriate and in a manner regulated by appropriate, ethical, legal and professional standards.
- **I understand** that any procedure in addition to those described on this form will be carried out only if necessary to save my life or to prevent serious harm to my health.
- I have listed below any procedures **which I do not wish to be carried out** without further discussion:

.....

- I have been told in the past by Public Health that I am at increased risk of CJD (Creutzfeldt-Jakob disease) or vCJD (variant Creutzfeldt-Jakob disease).

- Yes (*Health professional to refer to Trust CJD procedure DN92.*)
- No

**Patient**

Patient signature: .....

Date: .....

Name (PRINT): .....

**Confirmation of consent**

(To be completed by a health professional when the patient is admitted for the procedure, if the patient has signed the form in advance).

*On behalf of the team treating the patient, I have confirmed with the patient that they have no further questions and wish the procedure to go ahead.*

Signed: .....

Date: .....

Name (PRINT): .....

Job title: .....

**Statement of interpreter** (where appropriate).  
I have interpreted the information above to the patient to the best of my ability and in a way which I believe he/she can understand.

Signed: .....

Date: .....

Name (PRINT): .....

**A witness should sign below if the patient is unable to sign but has indicated his or her consent. Young people/children may also like a parent to sign here (see consent policy).**

Signed: .....

Date: .....

Name (PRINT): .....

**Important notes** (tick if applicable).

- Patient has advance decision to refuse treatment (e.g. Jehovah's Witness form)
- Patient has withdrawn consent (ask patient to sign/date here)

Patient signature: .....

Date: .....

Name (PRINT): .....



On behalf of the team treating the patient, I have confirmed with the patient that s/he has no further questions and wishes the procedure to go ahead.

Patient name: .....

Patient signature: ..... Date: .....

Name (PRINT): ..... Date: .....

Signature: ..... Job title: .....

**Important notes:** (tick if applicable)

There has been no change in the patient's condition  There is no new information

Patient has withdrawn consent (ask patient to sign/date here)

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