Cardiac Biopsy

**What is a Cardiac Biopsy?**

A Cardiac Biopsy takes small samples of heart muscle to examine under the microscope. It is most commonly done after heart transplant to look for rejection of the new heart. It is also done to try and find a cause of new onset heart failure or to determine the cause of specific heart muscle problems where all other tests cannot clearly make the diagnosis. It is typically a day procedure.

**How is it done?**
The test is performed in the Cardiac Catheter Laboratory by a Cardiologist, nurses and technicians. The laboratory looks like a small operating theatre. You will be awake during the test. After injection of local anaesthetic into the skin, a biotome (a long tube or catheter with small jaws at the tip) is inserted through a large vein usually in the right side of the neck but sometimes in the leg. The catheter is passed into your heart and 4 - 5 samples are taken from the right side of the heart muscle. The position of the catheter is confirmed by X-rays.

**How do I prepare for the test?**
- You will need to see a Cardiologist before the test to discuss and plan the procedure.

**Can I eat and drink before my test?**
A light early breakfast only is recommended

**Do I take my medications on the day of the test?**
- Take all your morning medications as you normally would.
- If you are taking blood thinning tablets (anticoagulants) such as Warfarin, Coumadin, Marevan or Dindevan, you must discuss if you should stop these with your Doctor before admission. Your doctor will discuss with you if you require any other replacement blood thinners during this period. Please continue taking all other medications.

**What do I wear for the test?**
You will change into a gown for the test. If you have been advised to stay overnight, bring night attire including dressing gown, slippers and toiletries.

**What do I do on the day?**
- Go to the Admissions Centre; you will then be directed to the Heart Centre on the 3d Floor.
- Do not drive yourself to or from the hospital. For safety reasons you must not use public transport. Someone must drive you home from hospital.
- Bring full details of your Health Cover ie. Private Health Insurance, Pensioner Health Benefit Card, Health Care Card or Repatriation Card.
**What happens during the test?**
In the Cardiac Laboratory you will be assisted onto a firm table. Your heart rhythm, Blood Pressure and Oxygen Saturation will be monitored. The skin over the appropriate vein will be cleaned with an alcohol solution and sterile sheets will be draped over you by technical staff. The staff will be present to assist you throughout the test. As described above, the catheter is then guided into position in the heart and samples taken. You may feel slight sensations as the catheter is moved about, but these are generally not uncomfortable.

**Please let the doctors know if you experience any discomfort during the test.**

**How long does the test take?**
A routine cardiac biopsy takes approximately 20-30 minutes.

**What are the risks?**
As with many medical tests there are some risks, although a cardiac biopsy is generally considered to be quite a safe test. Palpitations are not uncommon as the catheter is moved through the heart but usually settle spontaneously.

**Serious problems are rare** (less than 1 in a 100) but include puncture of the lung if the procedure is done from the neck, and a changed heart rhythm causing you to faint. There is a small risk of the bioptome going through the wall of the heart causing sudden bleeding around the heart. This risk is less than 1 in a 100 but may require urgent drainage by a needle or less commonly urgent surgery. Death is possible as a result of a perforation but uncommon.

**What happens after my test?**
The tube will be removed in the Catheter laboratory immediately the test is finished. You will be asked to press on the site for 10 minutes until bleeding has completely stopped. A nurse will check the site and put a band-aid on it. If there is no bleeding you should be able to go home after a further 30-60 minutes. You should avoid bending, heavy lifting or straining for the next 24 hours.

**How will I get my results?**
The results will be obtained within 24 hours and discussed with you. They will also be forwarded to your referring and local doctor.