In the Hermitage Medical Clinic Cardiology Department, we offer a range of non-invasive procedures used to diagnose various cardiac complaints.

The department uses state of the art equipment and the best clinical practice to help our patients.

Our tests include:

- Electrocardiogram (ECG)
- Echocardiogram
- Exercise stress test (EST)
- Holter Monitor
- BP monitor
- Event Monitor
- Pacemaker Follow-up
- ICD/Defibrillator Follow-up
- Loop Recorder Follow-up
- TOE (please see separate information leaflet)
ELECTROCARDIOGRAM (ECG)

Test duration: 10 minutes

An ECG is a quick and painless test used to assess the heart’s electrical activity. Through this test, we can diagnose many rhythm disorders of the heart.

The test involves placing electrodes on specific areas on your chest, wrists and ankles. The electrodes are connected to the ECG machine via the leads and a tracing of your heartbeat is recorded.

Prior to the test, the Cardiac Technician will ask you to remove your top clothes in order to place the electrodes correctly. A towel can be placed over your chest to respect your privacy. You will be asked to lie on a couch for 5-10 minutes, remaining still and relaxed. Once the ECG is recorded, the electrodes are removed and disposed of. The test will be reported by our Consultant Cardiologist.

Test preparation:
- On the day of your examination please do not apply any lotions or oils to your skin as it can affect the placement of the electrodes on the chest and cause interference on the recording.
**ECHOCARDIOGRAM (Echo)**

*Test duration: 30-45 minutes*

An Echocardiogram (echo) is an ultrasound scan of your heart. It is used to diagnose structural problems with the heart. The size and thickness of the chambers of the heart are measured. The ‘pump’ of the heart is calculated, valves are assessed and blood flow patterns analysed.

To facilitate the test, you will need to remove your top clothing and lie on your left side on the couch. A towel will be placed across your chest to respect your privacy. Multiple views of the heart from different locations on your chest will be taken. At different stages throughout the procedure, you will hear noises which correspond to the blood flowing through the heart. These are normal sounds and are part of the routine examination.

All the images are stored and reported by our Consultant Cardiologist.
**Exercise Stress Test**

*Test duration: 45 minutes*

An Exercise Stress Test (EST) involves doing gentle exercise while connected to an ECG monitor. Different patients may be referred for EST, including those suspected of coronary artery disease, those with palpitations or to assess exercise tolerance pre-surgery.

In order to do the test, electrodes are placed on the chest and connected wirelessly to the equipment. Prior to the test, the Cardiac Technician will check your BP and review your history and list of cardiac medications. The level of exercise starts slow but will increase in height and speed every three minutes. The Cardiac Technician will monitor your ECG and BP throughout the study and can stop the test as needed.

The exercise starts as a gentle stroll and as it progresses you should report any symptoms you may experience, be they chest pain, tightness, pressure, shortness of breath or palpitations.

You will be encouraged to do as much exercise as you can to get the most out of the examination, but the test can be stopped at any stage should you feel the need. You will be monitored for post exercise until your heart rate and BP return to baseline. The test will be reported by our Consultant Cardiologist.

**Test preparation:**

- On the day of your examination please do not apply any lotions or oils to your skin as it can affect the placement of the electrodes on the chest and cause interference on the recording.
- Loose comfortable clothing and appropriate footwear should be worn eg tracksuit and runners.
- It is important that you do not come fasting – please have something to eat no sooner than an hour before the test.
**Ambulatory Holter Monitor**

*Test duration: 15 minutes for fitting the monitor*

A Holter Monitor is a continuous recording of your ECG. It is used to diagnose many rhythm disorders that are not immediately evident on an ECG.

It consists of wearing a small monitor. The monitor is attached to the chest using three electrodes. It may be worn for 24 or 48 hours depending on your Doctor’s request.

You may carry out your normal duties while wearing this monitor. However, the device cannot get wet so you are asked to refrain from bathing or showering over the 24 hour period. The monitor can be attached to your waistband for easy carrying.

While wearing the monitor, we will give you a diary in order to record any symptoms. After the 24 hours, you return to the Cardiac Department for removal of the Holter Monitor. Fitting of the monitor should take 15 minutes and allow 5 minutes for its removal. The test will be reported by our Consultant Cardiologist.

**Test preparation:**
- On the day of your examination please do not apply any lotions or oils to your skin as it can affect the placement of the electrodes on the chest and cause interference on the recording.
- You will need to return the monitor after 24 hours as it may be booked for another patient. If you are going to be late please contact the department as soon as possible.
**Ambulatory BP Monitor**

*Test duration: 15 minutes for fitting the monitor*

A Blood Pressure monitor continuously records your BP for 24 hours. It is used to diagnose patients with hypertension or high blood pressure. Many patients experience high BP when they are with their Doctor which then normalises at home. This is termed “White Coat Hypertension”. In order to differentiate between the two, a 24 hour recording is needed.

The monitor is worn on a belt around the waist. It is attached to the cuff on your arm. This cuff will inflate and deflate every twenty minutes during the day and every 60 minutes at night. It is advisable to wear a loose fitting top.

You should carry out your normal daily routine. The device cannot get wet so you are asked to refrain from bathing or showering over the 24 hour period. While wearing the monitor, we will give you a diary in order to record any symptoms.

After the 24 hours, you will return to the Cardiac Department for removal of the BP Monitor. Fitting of the monitor should take 15 minutes and allow 10 minutes for its removal. The result will be reported by our Consultant Cardiologist.

**Test preparation:**

- You are advised to wear a loose fitting top to accommodate the cuff on your arm.
- You will need to return the monitor after 24 hours as it may be booked for another patient. If you are going to be late please contact the department as soon as possible.
**Event Monitor**

**Test duration: 20 minutes for fitting of monitor.**

An event monitor is a small heart rate monitor that you wear for 1 week. The monitor is attached to the chest using three electrodes and can be clipped to your waistband. Your doctor may request this monitor for you if you are having symptoms that occur irregularly – not every day. It differs from a holter monitor in that you wear it for a longer period and it only records when you activate it when you experience your symptoms.

The Cardiac technician will show you how to attach the monitor and explain how to activate it to record a symptom. You can remove the monitor every morning to facilitate bathing and re-attach immediately after. You will be given an instruction sheet, spare electrodes and a diary to record your symptoms in.

**Test preparation:**
- On the week of your examination please do not apply any lotions or oils to your skin as it can affect the placement of the electrodes on the chest and cause interference on the recording.
- You will need to return the monitor after 1 week as it may be booked for another patient. If you are going to be late please contact the department as soon as possible.
PACEMAKER & ICD/DEFIBRILLATOR & LOOP RECORDER FOLLOW-UP

Test duration: 15-30 minutes depending on type of device implanted

If you have a pacemaker, defibrillator or loop recorder inserted you will need to attend for regular checks to ensure the device is set up and working appropriately for you. At implant you were given separate information leaflets on your particular device and on how often you need to attend for follow up checks.

It is important that you attend for these follow-up checks, to ensure it is working appropriately and that there is sufficient battery life remaining.

If you experience any symptoms especially similar to what you had before the device was implanted or should you have any concerns please contact the department.
Referral information
A referral letter is required for all tests. This can be from your GP or Consultant.

Insurance Details
All fees are payable on the day of examination. Not all cardiology examinations are covered by insurance. You may be subject to an excess. Please check with your insurance provider before attending for your appointment. Fees paid may be claimed back against your insurance or against your tax using a Med 1 form.

Contact details
The Cardiology department can be contacted from 9am to 5pm Monday to Friday as follows:
Phone: 01 6459450
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e-mail: cardiology@hermitageclinic.ie