

## CT Coronary Angiogram with ivabradine

### What is a CT Coronary Angiogram?

This is an investigation using a high resolution CT x-ray scanner to perform a test called a CT coronary angiogram. It shows pictures of the coronary arteries and can assess if you have any signs of disease in them which may be restricting the flow of blood being delivered to your heart muscle. It is important that you tell your doctor if you are a diabetic on the drug metformin, or if you have a medical history of asthma, kidney problems or a pacemaker.

### Why would I need this procedure?

To identify a potential cause of your symptoms and to examine the anatomy of your heart.

### What are the symptoms that have led to me having this procedure?

You may have been having chest pain and/ or shortness of breath.

### What are the alternatives?

The standard coronary angiogram is the 'Gold Standard' test as it can show narrowing's in even the very small arteries. It is however more invasive and may not be necessary at this stage (see separate information sheet). Stress echocardiography and nuclear medicine studies may also be alternatives, however these give functional information rather than showing narrowing's.

### What are the potential risks and side effects?

Having a CT coronary angiogram does mean that you are exposed to some radiation. Every day we are exposed to small amounts of radiation which occurs naturally in the environment. Women who are pregnant will be advised to avoid radiation where possible, but if the mother's health is at serious risk she may be advised to have a test involving radiation, because the unborn baby depends on her health for survival.

The amounts of radiation used in most medical tests are quite small, so if you have been told that it is likely that you have heart disease and you need, for example, a coronary angiogram, the risks involved in not having the test may well be far greater than the risks from radiation. Overall, a CT coronary angiogram is less invasive than a standard coronary angiogram and therefore carries less risk.

### What are the expected benefits of treatment?

If the CT coronary angiogram finds evidence of coronary artery disease it will be possible to recommend treatment which may help to help reduce your risk of future heart problems.

### How do I take ivabradine tablets before my scan?

You have also been provided with some medication to take for two days prior to your Cardiac CT Scan. For the scan your heart rate needs to be slowed. This is to ensure we obtain clear images of your heart arteries. Most patients receive beta-blockers to slow the heart rate but as you are asthmatic (or have an identified respiratory condition) it is not safe to give you beta-blockers. Instead you will be required to take a drug called ivabradine.

Unlike beta-blockers, this medication gently slows the heart rate without any risk of causing breathing problems or changes in blood pressure. The CT department will be in contact soon with the date of your scan so that you know when to start taking the tablets. Please take 7.5 mg twice a day for the two days prior to your scan.

### **Where will the procedure take place?**

This investigation will be performed at Conquest Hospital or Eastbourne District General Hospital CT department.

### **What should I do before I come into hospital?**

On the day of your procedure you should avoid caffeine, smoking and anything else that can speed up your heart rate.

### **What happens during the test?**

A small tube (cannula) will be inserted into your arm. For this test you lie on a bed under a scanner. At the start of the scan some dye (called a contrast medium) will be injected into your arm to help to show up the blood vessels on the surface of the heart and then the images are taken.

### **How will I feel afterwards?**

This depends on how you respond to the rate-lowering drugs but most people feel no ill effects.

### **How long will I be in hospital?**

Expect to be in the CT department for between 2 to 4 hours.

### **How soon will I be able to resume normal activities?**

You may feel tired and should avoid strenuous activity for the rest of the day.

### **Consent**

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team. You will also be asked to give authorisation for your images to be sent for advanced cardiac CT analysis with our third party provider (Heartflow Inc) in the USA if deemed clinically appropriate.

### **Sources of information:**

#### **Conquest Hospital**

CT Department: 0300 131 4500 Ext: 148843  
Coronary Care Unit: 01424 758046 Ext: 148436  
Cardiology Department: 0300 131 4500 Ext: 148029

#### **Eastbourne DGH**

CT Department: 0300 131 4500 Ext: 135788 (Direct Dial: 01323 435788)  
Coronary care unit: 0300 131 4500 Ext: 136634  
Cardiology Department: 0300 131 4500 Ext: 134742  
Rapid Access Chest Pain Nurse Specialist: 0300 131 4500 Ext: 138217

## Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner. If you have any questions relating to your ivabradine these may be answered by reading the manufacturer's Patient Information Leaflet. If you have any further questions please contact our patient medication helpline which is open Monday to Friday 9.00-17.30 on Tel: 0300 131 4500 Ext: 147067 (Conquest) or 0300 131 4500 Ext: 133785 (Eastbourne).

## Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team - Tel: 0300 131 4500 Ext: 5860 or by email: [esh-tr.patientexperience@nhs.net](mailto:esh-tr.patientexperience@nhs.net)

## Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

## Other formats

**If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.**

**Tel: 0300 131 4500 Email: [esh-tr.AccessibleInformation@nhs.net](mailto:esh-tr.AccessibleInformation@nhs.net)**

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

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## Reference

Written by: Sally Mason, Rapid Access Chest Pain Nurse Specialist.

The following clinicians have been consulted and agreed this patient information:  
Professor Nik Patel, Dr Andrew Marshall and Dr Panagiotis Spanos (Consultant Cardiologists)  
The directorate group that have agreed this patient information leaflet: Cardiovascular Medicine

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