

High Definition Cardiac CT Angiography – Patient Information

Coronary artery disease

This is caused by a build-up of fatty material in the walls of the coronary arteries which supply blood to the heart muscle. This condition is known as coronary artery disease and is characterised by atherosclerotic plaques. If one of these plaques spontaneously ruptures it can result in complete blockage of the coronary artery which can cause a heart attack. Detecting these plaques is therefore important to help identify who may be at risk.

Who is at Risk of Coronary Artery Disease

- Diabetes
- High blood pressure
- High cholesterol
- Obesity
- Smoking
- Stress
- Sedentary lifestyle
- Family history of heart disease



Diagnosing Coronary Artery Disease

High Definition CT is the most accurate non-invasive way to evaluate the coronary arteries. For most patients, CT coronary angiography can be used instead of traditional invasive coronary angiography and is much more accurate in ruling out coronary artery disease than exercise testing. It can accurately show the presence of coronary artery disease before this becomes a clinical problem and can help in identifying people who may require treatment with drugs, such as statins, to help prevent heart attacks. It is possible to acquire high-resolution three-dimensional images of the moving heart, coronary arteries and great vessels as well as information on the heart muscle and cardiac function.

Preparing for a High Definition Cardiac CT Scan

Please take the prescribed β -blocker 2 hrs prior to your scan in order to regulate your heart rate. The examination is done as an out-patient procedure and takes about 20 minutes. Your heart will be monitored during the scan using ECG leads. To visualise the arteries it is necessary to inject an X-ray contrast media this will be done through a needle in a vein in the arm.

After The Scan

You can resume all normal activities after the scan without delay. The HDCT scan images will be reconstructed by the cardiologist and a discussion of the findings will take place immediately afterwards. A full report of the scan will be provided to you and your GP.