

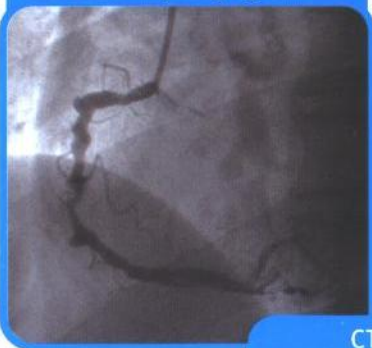
## Introduction

Heart Disease is one of the primary cause of death in the world. Death from heart disease can sometimes occur without any warning signs. Conventionally, non-invasive methods allowed diagnosis only when the disease is at its advanced stage. The Coronary CT Angiography provides a new, revolutionary solution by allowing earlier detection of heart disease.

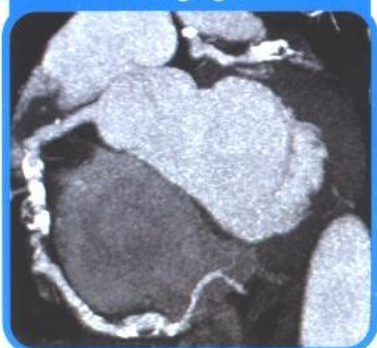
## What Is Coronary CT Angiography?

Coronary CT Angiography uses a 64-slice scanner to capture precise and detailed images of the heart and is a highly accurate alternative to the conventional coronary angiogram.

Coronary Angiogram



CT Angiogram



Comparison between Coronary Angiogram & CT Angiogram

## What Is The Purpose Of This Test?

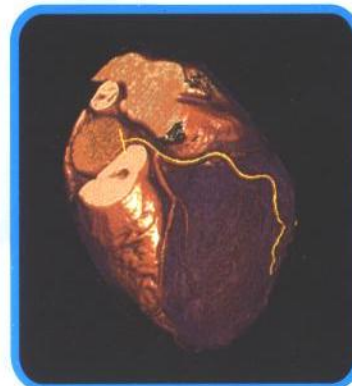
The main purpose of the test is to rule out coronary artery disease.

## What Can I Expect?

The procedure is done on an outpatient basis and patients are able to resume normal activities after the scan. You will be required to fast for 4 hours prior to the scan. For e.g. if your appointment is at 3pm, you will need to fast from 11am.

The scan is done at the Imaging Centre located on level 3 of Kent Ridge Wing 2. You will need to arrive at the Centre about 1 hour prior to your appointment time. You may be given oral medication (beta-blockers) to slow your heart rate to an optimal level for the scan. It usually takes between 30-60 minutes for the medication to take effect. If you have a history of asthma, please inform our staff prior to your scan. Patients with known kidney impairment or who are taking a diabetic drug called METFORMIN should also inform our staff prior to the scan as this is a known risk for the X-ray contrast.

You will be given an injection of an x-ray dye (contrast agent) through a vein in your arm and will be asked to lie down on a couch that will slide through a round opening in the scanner. Electrodes will be attached to your chest to monitor your heart.



3D Coronary Reconstruction

You will be asked to keep still and hold your breath for about 10 seconds. As the couch moves through the opening, images of your heart will be taken. The scan takes no more than 15 minutes to complete. After the scan, your blood pressure and heart rate will be monitored for about 10 minutes to ensure you are well before leaving the Imaging Centre.

## Who Should Have A Coronary CT Angiography?

Any individual with the following conditions may be considered for CT angiography:

- Increased cardiovascular risk (e.g. family history, hypertension, high cholesterol or diabetes)
- Atypical chest symptoms
- Inconclusive exercise (treadmill) testing
- Individuals who have had bypass surgery, angioplasty or stenting, and need a re-assessment of the revascularization(s) site (bypass graft or stent patency)
- Evaluation of Congenital Heart Disease, post heart transplant, coronary vein assessment and pacemaker placement

## What Should I Do If I Would Like To Have A Coronary CT Angiography?

You should first consult a doctor who will assess your eligibility for the scan. Your doctor will review the results with you at your next clinic appointment.

