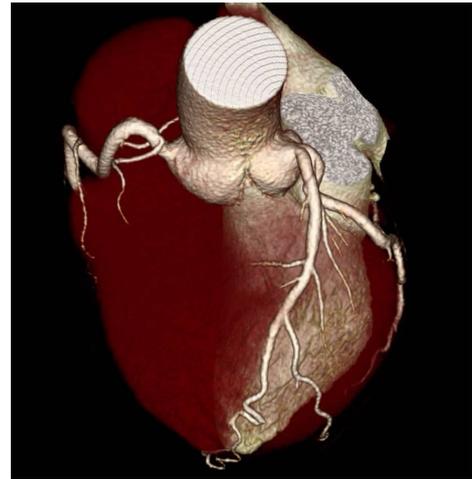


Cardiac Investigations - CT Coronary Angiogram

Using the same technology as coronary artery calcium scoring it is possible to view the coronary arteries and their major branches, not only looking for calcium deposits but also for any signs of narrowing within them. This technique detects both calcium deposits and "soft plaque", and is called a CT coronary angiogram. It is rapidly becoming established as an alternative to conventional coronary angiography, which necessitates an admission to hospital, usually as a day case, and entails a higher risk of complication, albeit still low overall. It is important to note, however, that the radiation doses of the two techniques are not that dissimilar. In addition to providing information about the blood supply to the heart, a CT angiogram can also assess the pumping action of the heart and provide information about other structures surrounding the heart.



The patient should not eat for two hours prior to the scan and caffeine should be avoided for 12 hours beforehand, but drinking water is not an issue. Better quality images are obtained at slower heart rates, and so a tablet or injection of a beta blocker may be given to slow the heart rate adequately for the scan, and the patient will be attached to an ECG monitor for the duration of the scan. Since the test entails the use of a radiographic dye (contrast) to outline the arteries, a recent blood test is needed to check the patient's kidney function beforehand, since the dye will be excreted through the kidneys into the urine. A CT coronary angiogram is an outpatient procedure lasting approximately 45 minutes, and the patient can leave the department immediately after the scan and resume normal activities.

