## **Cardiac CT**

# A patient's guide

#### **Welcome to Coronary CT**

Coronary CT angiography is useful to determine if the coronary arteries are the cause of chest discomfort and/or shortness of breath.

Coronary CT angiography is a quick, non-invasive test that uses computed tomography (CT) to look at the tiny blood vessels that supply the heart muscle (the coronary arteries).

Coronary CT angiography allows your physician to see if plaque has developed and resulted in blockages (stenosis) that may be causing your symptoms, or may lead to future heart problems.

Coronary CT angiography is generally considered best for low risk individuals with the symptoms described above but have no prior history of coronary disease, with a family history of heart disease or unclear findings from a cardiac stress test.

During the examination, you will be connected to an ECG (electrocardiogram) to measure your heart rhythm so the CT images can be synced with the motion of the heart.

During the examination, contrast (iodine dye) is injected in your vein to visualize the coronary arteries. Some patients may feel a warm sensation, a metallic taste, and/or a urinary sensation when the contrast is injected. These are normal events and are temporary, lasting less than two minutes; these symptoms of contrast are not considered allergic reactions. Allergic reactions to the contrast dye exist but occur rarely.

#### What to expect during your CT Examination:

- You will change into a hospital gown and be asked to remove metal objects as jewelry, which can affect the images.
- You will lie on the scanner table, and you will be asked to raise your arms over your head for the duration of the exam.
- ECG's will be placed on your chest.
- During the examination you will be asked to lie still and hold your breath for a short period (typically less than 15 seconds). It is very important to be still and to not breathe, move, or swallow during the scan.
- High or irregular heartbeats can impact the image quality. There are medicines we
  can give you to reduce your heart rate and its variability, based on your specific
  cardiac rhythm.

- It is common to feel a warm sensation as the contrast circulates through your body. Some patients may also have a urinary sensation and/or metallic taste in the mouth. This is temporary and completely normal.
- If you have a high heart rate, you will be given beta- blocker medication as a tablet or an injection. In addition, on the scan table you will be given Nitroglycerin spray under your tongue. This is to dilate the arteries in the heart, which makes them easier to see. You might get a slight headache or feel a little dizzy from this. This sensation is also very temporary; nitroglycerin is a very short acting medication.
- The whole examination takes about 15- 30 minutes; most of this time will involve preparation. The actual scanning takes only a few seconds.

### How to prepare for the coronary CT angiography:

- Prior to the CT examination, your physician will need to take a blood sample to evaluate your kidney function, if this information is not available in the referral request.
  - -please see the information in your invitation letter.
- Fill out the form that comes together with this information flyer regarding your medication and take it with you to your appointment.
- Avoid any caffeinated drinks on the day before or the day of your exam. Coffee, tea, energy drinks, or caffeinated sodas.
- Avoid smoking or snuff on the day of your exam.
- Do not use Viagra or any similar medication 48-78 hours before the examination.
- Tell your technologist and your doctor if you are:
  - o pregnant
  - o allergic to iodine and or any medications
  - o Taking medications for erectile dysfunction or pulmonary hypertension.
- On the day of your exam, do not drink for 1 hour prior to your scheduled appointment. You may eat light breakfast the same day.

#### **Coronary Calcium Scan**

Every patient undergoes a CT scan without an iodine contrast injection, prior to the CT scan with contrast. This scan can show hardened plaques for cardiac risk stratification. A CT scan with contrast injection may not be needed if there is a high amount of calcifications in the coronary arteries.

An alternative examination may be a more traditional invasive non-CT angiography.

If you have any question regarding your CT examination or your appointment, please call:

Phone: 77 62 73 01 / 77 66 91 99 (Radiology Scheduling Center / Røntgen ekspedisjonen)

Phone: 77 62 69 50 (medical outpatient clinic / Hjertemedisinsk poliklinikk)

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