

Calcium score

The calcium score is 142 . Distribution of calcium:- LMCA, LAD, LCx, RCA This score is consistent with moderate coronary artery atherosclerotic plaque burden. On a population basis, this score places the patient in the 55th percentile rank for age, race and gender according to the MESA cohort.

Dominance

The circulation is right dominant .

Left main coronary artery

The LMCA arises from the left coronary sinus of Valsalva in the usual position. It divides into left anterior descending, intermediate and circumflex vessels. It contains focal mixed plaque distally causing <25% stenosis.

Left anterior descending artery

The LAD is a medium calibre artery and gives rise to 2 main diagonal branches. There is diffuse mixed, predominantly calcified plaque in the proximal and mid segments associated with maximal stenosis of 25-49%. There is further non-obstructive plaque in the first diagonal branch and in the intermediate artery. Focal calcification is noted in the distal LAD.

Circumflex artery

Focal calcified plaque is seen at the ostium of the circumflex and in the proximal vessel associated with 25-49% stenosis. The first obtuse marginal branch is a medium calibre vessel and exhibits diffuse mixed plaque proximally and in the mid vessel which is not obviously obstructive. The second OM branch appears normal.

Right coronary artery

The RCA is a medium calibre vessel which arises from the right coronary sinus of Valsalva in the usual position and gives rise to two posterior descending branches but no posterolateral branches. Multifocal calcified plaque is seen in the proximal vessel associated with <50% stenosis. No further atherosclerotic changes are detected within the main vessel or distal branches.

ADDITIONAL CARDIAC FINDINGS

The ascending aorta appears mildly dilated. There is calcification in the aortic root and leaflets.

OTHER FINDINGS

There is an enlarged right hilar lymph node measuring 14 mm in short axis diameter, and a prominent right tracheobronchial lymph node measuring up to 11 mm in short axis diameter. These are indeterminate. No lung nodules are seen. The visualised upper abdomen appears normal.

CONCLUSION:

The epicardial coronary arteries exhibit moderate non-obstructive atherosclerotic changes involving the LMCA and all three major vessels . Note is made of some motion artefact due to a high scan heart rate despite maximal metoprolol dose.

The ascending aorta appears mildly dilated.

Tight control of modifiable vascular risk factors and periodic functional testing is recommended.

Enlarged right hilar and right tracheobronchial lymph node of uncertain significance. If clinically warranted a follow-up CT could be performed in 3 months to ensure stability.

Thank you for referring this patient.

Primary Read of Cardiac Findings by: Dr Bruce Banner

Co-read of Cardiac and Non-Cardiac Findings by: Dr Captain Marvel

General Report
#1041004:
Authorised by
Dr Wonder
Woman () at
27/01/2019
17:56

Date Serviced:
25/01/2019
09:33

Requests:
19/RA/0001902
(Series 1;
Requested by:
Dr; Work Site:
RA)

Services:
CT Coronary
Angiogram
(NR)
(25/01/2019
09:30 -
25/01/2019
09:40)

EXAM: CT CORONARY ANGIOGRAM AND CALCIUM SCORE

CLINICAL DETAILS:

Screening test. Progress study. Risk factors for coronary artery disease: - Family history.
Mild hyperlipidaemia. Normal CTCA 8 years ago.

TECHNICAL PARAMETERS:

Single phase CT coronary angiography was performed using prospective ECG gating at 100 kVp. The total radiation dose (DLP) including scout, non contrast and contrast acquisitions was 142 mGycm^{-1} . The patient had been pre-treated with beta blockers. Medication administered in the department: 25 mg oral metoprolol. 800 mcg nitrates. Intravenous iodine contrast volume: 100 mL. Data acquisition was at an average heart rate of 52 bpm. Image quality was good .

FINDINGS:

CORONARY ARTERIES