Co-read of Cardiac and Non-Cardiac Findings by: Dr Wonder Woman

General Report #1050635: Authorised by Dr Donald Duck () at 15/02/2019 13:59

Date Serviced: 14/02/2019 08:55

Requests: 19/BJ/0001586 (Series 0; Requested by: Dr; Work Site: BJ)

Services: CT Coronary Angiogram (NR) (14/02/2019 09:30 -14/02/2019 09:50)

## EXAM: CT CORONARY ANGIOGRAM AND CALCIUM SCORE

## **CLINICAL DETAILS:**

Screening test. Asymptomatic. Minor coronary atherosclerosis 2007. Risk factors for coronary artery disease: - Family history. Hyperlipidaemia.

## **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 161 mGycm<sup>-1</sup>. The patient had been pre-treated with beta blockers. Medication administered in the department: 800 mcg nitrates. Intravenous iodine contrast volume: 90 mL. Data acquisition was at an average heart rate of 49 bpm. Image quality was good.

## **FINDINGS:**

## **CORONARY ARTERIES**

#### Calcium score

The calcium score is 325. Distribution of calcium:- 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 82nd 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 is short and divides into left anterior descending and circumflex vessels. It contains focal calcified plaque at its ostium causing <25% stenosis.

## Left anterior descending artery

The LAD is a large calibre artery and gives rise to one main diagonal branch. There is multifocal mixed plaque in the proximal, mid and distal segments associated with maximal stenosis of 25-49%. The first diagonal branch is of small calibre. The second diagonal branch is a medium calibre vessel and appears undiseased.

# **Circumflex artery**

Focal calcified plaque is seen in the proximal circumflex associated with <25% stenosis. There is additional focal calcified plaque in the first OM branch associated with <25% stenosis. No further atherosclerotic changes of significance are detected within the main circumflex artery or major obtuse marginal branches.

## Right coronary artery

The RCA is a large calibre vessel which arises from the right coronary sinus of Valsalva in the usual position and gives rise to multiple posterior descending branches. 2 foci of calcification are seen in the mid vessel causing no appreciable luminal narrowing. No further atherosclerotic changes are detected within the main vessel or distal branches.

#### ADDITIONAL CARDIAC FINDINGS

The aortic valve appears bicuspid and there is borderline dilatation of the ascending aorta at 38mm. There is focal calcification in the aortic root. The left ventricle appears mildly dilated and there appears to be borderline LVH.

## **OTHER FINDINGS**

There is mild gravitational atelectasis.

#### **CONCLUSION:**