**Example CT Coronary Angiogram Reports**

This document contains some sample CT coronary angiogram reports to assist with preparing applications for BSCI/BSCCT accreditation. The purpose of this document is not to show you how to report as we appreciate that there is a range of reporting styles. Instead, the purpose is to demonstrate an example of what we require to be submitted for BSCI accreditation as the ***25 dated, anonymised but otherwise complete cardiovascular CT reports.*** As shown below we require complete reports not a logbook of findings. These must include date of study, radiation dose (DLP) and scan technique and must be anonymised. There are 8 cases listed below but we require 25 to be submitted.

We hope you find this helpful in submitting the required information for your application.

1.

NHS Number: XXXXXXXX
Referring Doctor: XXXXXXX
**02/07/2024 CT Cardiac angiogram coronary**
Clinical History: worsening exertional jaw pain, trop 30 and 34. ECG nil acute. PMH of HTN. No previous cardiac history.
.
Report: 50 mg IV metoprolol and two sublingual GTN tablets. Sinus rhythm. Single beat, volume acquisition using a wide radiation pulse (30-80% of the RR interval) due to increased heart rate despite maximal beta blockers. Despite an acquisition heart rate of 70 beats per minute, diagnostic quality images have been obtained of the coronary arteries with only mild movement artefact. DLP 190.3
.
Left main stem: Low attenuation plaque in the distal left main stem associated with focal calcification which causes positive remodelling and left main stem tapering (25-49% luminal diameter stenosis).
.
LAD: Extensive mixed plaque throughout the proximal and mid LAD. In the proximal LAD this causes mild stenosis only (less than 50% luminal diameter narrowing). In the mid LAD there is a an approx 2 cm length of irregular narrowing with at least two regions of 70-99% stenosis within this segment. The distal LAD is normal.
.
The first diagonal artery is a trivial vessel. The large second diagonal artery contains severe mixed plaque and a stenosis of 70-99%.
.
RCA: Dominant. There is a proximal RCA stenosis of 70-99% and a mid RCA stenosis of 70-99%, both due to mixed plaque.
.
Circumflex artery: Scattered plaque proximally and an occlusion in the mid vessel with contrast seen in the distal vessel beyond the occlusion. This occlusion is noncalcified. There is also a probable occlusion of the proximal part of the first obtuse marginal artery immediately following its origin. The second obtuse marginal artery contains extensive plaque but there is some movement and it is not clear whether this is still patent.
.
Left ventricular mural thickness is normal throughout and it enhances normally. The cardiac chambers are of normal size.
.
No significant abnormality is seen in the lungs, mediastinum or bones on the limited coverage obtained.
.
Conclusion: Extensive coronary artery plaque burden with the following stenoses:
- Mid LAD two regions of 70-99% stenosis
- Proximal second diagonal artery stenosis of 70-99%
- Proximal RCA stenosis 7-99%
- Mid RCA stenosis 70-99% (dominant vessel)
- Mid circumflex artery occlusion
- First obtuse marginal artery, probable proximal occlusion
- Second obtuse marginal artery uncertain but possibly also occluded.

CAD-RADS 5

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2.

NHS Number: XXXXXXXX
Referring Doctor: XXXXXXX
**02/07/2024 CT Cardiac angiogram coronary**

Clinical History: Atypical chest pain. Strong family history. Previous brachial plexus surgery. Ct coronary angiogram to rule out IHD
.
Report: 5 mg IV metoprolol and two sublingual GTN tablets. Sinus rhythm. Single beat, volume acquisition using an end diastolic radiation pulse. Technically high quality images have been obtained of the coronary arteries. DLP 33.6.
.
The coronary artery appearances are entirely normal with no evidence of plaque or stenosis. The right coronary artery is a large dominant vessel supplying posterolateral branches to the left ventricle as well as the PDA.
.
The non coronary appearances of the heart are normal.
.
No significant abnormality is seen in the lungs, mediastinum or bones on the limited coverage obtained.

Conclusion: Normal coronary arteries.

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3.

NHS Number: XXXXXXX
Referring Doctor: XXXXXXX
**02/07/2024 CT Cardiac angiogram coronary**

Clinical History: 1-month history of increased breathlessness. Episodes of exertional chest pain when walking up inclines and easing with rest.
.
Report: 10 mg IV metoprolol and two sublingual GTN tablets. Sinus rhythm. Single beat, volume acquisition using an end diastolic radiation pulse (73-77% of the RR interval). Technically high quality images have been obtained of the coronary arteries. DLP 197.6
.
Left main stem: Normal.
.
LAD: The proximal LAD contains mixed plaque causing mild narrowing only (well under 50% luminal diameter stenosis). This divides into two vessels, the medial of which passes in the ventricular groove but peters out early and the more lateral vessel passes lateral to the interventricular groove initially but returns to the interventricular groove before continuing almost to the cardiac apex. Effectively this means there are two LAD vessels. The more medial of these contains extensive calcified plaque with a proximal stenosis of 70-99%. The more lateral vessel contains a large mixed (but primarily low attenuation) plaque associated with very marked positive remodelling and severe luminal narrowing of 70-99%. The distal part of this vessel is normal.
.
RCA: Dominant. Scattered plaque in the proximal and mid sections causing mild stenosis only (less than 25%).
.
LCX: Mid circumflex plaque causes stenosis of 25-49%. Normal obtuse marginals.
.
The non coronary appearances of the heart are normal. No significant abnormality is seen in the lungs, mediastinum or bones on the limited coverage obtained.
.
Conclusion: The LAD divides into two vessels (effectively a dual LAD) both containing proximal stenoses of 70-99%. CAD-RADS 4A

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4.

NHS Number: XXXXXX
Referring Doctor: XXXXX
**02/07/2024 CT Cardiac angiogram coronary**
Clinical History: CABG may 2023 with LIMA to the LAD, VG to OM and PDA. recurrence of angina. familial hypertryglyc
.
Report: 50 mg IV metoprolol and two sublingual GTN tablets. Sinus rhythm. Single beat, wide radiation pulse due to increased heart rate despite maximal beta blockers (acquisition heart rate 68 beats per minute). A 16 cm volume has been used to maximise coverage of the coronary artery bypass grafts in a single acquisition. High quality images have been obtained of the coronary arteries and bypass grafts. DLP 262.9
.
Grafts: There are 3 coronary artery bypass grafts.
I. LIMA to LAD. The most cranial part of the LIMA graft has not been included in the imaged volume. The remainder of the LIMA graft is patent but the anastomosis and runoff are poorly seen.
.
2. Vein graft to the PDA arising from the ascending aorta at the 10 o'clock position. The graft opacifies well and has good runoff.
.
3. Vein graft to the obtuse marginal artery arising from the ascending aorta in the 1 o'clock position. This is widely patent with good runoff.
.
Native coronary arteries.
Left main stem: Calcified plaque but no stenosis.
LAD: Occluded throughout the mid to distal sections including the stented distal LAD. I suspect the large first diagonal artery is also occluded.
Right coronary artery: Dominant. This contains extensive stents throughout the majority of the vessel but is occluded throughout its length up to the PDA.
LCX: Extensive plaque but appears patent.
.
The non coronary appearances of the heart are normal. No significant abnormality is identified in the lungs, mediastinum or bones on the limited coverage obtained.
.
Conclusion: Three patent coronary artery bypass grafts. Severe native coronary artery disease with occlusion of the entire mid to distal LAD, entire right coronary artery and probably also at the first diagonal artery. Ongoing angina is therefore likely to be due to poor back-filling due to the occluded native coronary arteries.

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5.

NHS Number: XXXXXXXX
Referring Doctor: XXXXXXXX
**02/07/2024 CT Cardiac angiogram coronary**
Clinical History: ? angina. The chest tightness and breathlessness on exertion.? Coronary heart disease
.
Report: 25 mg IV metoprolol and two sublingual GTN tablets. Sinus rhythm. Single beat, volume acquisition with an end-diastolic acquisition (70-80% of the RR interval). Technically high quality images have been obtained of the coronary arteries. DLP 101.9
.
Left main stem: Normal.
.
LAD: Calcified plaque in the proximal LAD associated with positive remodelling but no luminal narrowing. The remainder of the LAD and its branches are normal.
.
RCA: Dominant. Normal.
.
LCX: Normal. The obtuse marginal branches and an intermediate artery are also normal.
.
The non coronary appearances of the heart are normal. No significant abnormality is seen in the lungs, mediastinum or bones on the limited coverage obtained.
.
Conclusion: Low burden of coronary artery plaque and no obstructive coronary disease (no stenosis greater than 50% luminal diameter reduction).

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6.

NHS Number: XXXXXXX
Referring Doctor: XXXXX
**02/07/2024 CT Cardiac angiogram coronary**
Clinical History: heaviness in chest like an elephant and possible inappropriate sinus tachycardia
.
Report: Two sublingual GTN tablets. IV beta blockers were not given due to a history of unstable asthma requiring a home nebuliser. Sinus rhythm. Single beat, wide radiation pulse (30-80% of the RR interval) due to fast heart rate. Acquisition heart rate was 92 beats per minute. As a result there is some movement artefact but using multiple reconstructions, diagnostic quality images have been obtained of the coronary arteries. DLP 195.1
.
Left main stem: Normal.
.
LAD: In the mid LAD mixed plaque causes a mild stenosis of 25-49% followed by a moderate stenosis of 50-69%. Normal distal LAD and the large first diagonal artery.
.
RCA: Dominant. There is a fleck of plaque in the distal RCA without associated stenosis.
.
L C X: Normal with no major branches.
.
The non coronary appearances of the heart are normal. There is a T7 wedge compression fracture which is unchanged from the CT chest study dated 29/05/2024. No other significant abnormality is seen in the lungs, mediastinum or bones on the limited coverage obtained.
.
Conclusion: Mild coronary artery plaque burden. Two mid LAD stenoses of 25-49% and 50-69%. Images were sent Heart flow but could not be analyzed due to apparent movement artefact. A functional test should therefore be considered. CAD-RADS 3.

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7.
NHS Number: XXXXXXX
Referring Doctor: XXXXXXXX

 **20/08/2024 CT Cardiac angiogram coronary**

Clinical History: ? CAD OBESE WITH RISK FACTROS 9HYPERTENSION AND PRE DIABETIC). HE IS BB AND RESTING HR IS 60 PER MINUTE
.
Report: Two sublingual GTN tablets. IV beta blockers were not required due to low resting heart rate. Sinus rhythm. Single beat, volume acquisition using an end-diastolic acquisition (70-80% of the RR interval). There is a little movement artefact but image quality remains diagnostic. DLP 180.

Left main stem: Normal.
.
LAD: Scattered plaque in the proximal segment but no significant stenosis (nothing approaching 50%). The first diagonal artery contains mixed plaque proximally said with mild stenosis (less than 50% luminal diameter reduction).
.
RCA: Dominant. Few flecks of calcified plaque in the mid section without stenosis.
.
L C X: Short vessel with small obtuse marginal branches. There is calcified plaque in the proximal L C X without associated stenosis. Normal obtuse marginal branches.
.
Trileaflet aortic valve with mild calcification. The non coronary appearances of the heart are otherwise normal.
.
Multiple bands of atelectasis in the lower lungs and a stable well-defined low density nodule in the right lower lobe measuring 9 mm, which is unchanged from the CT thoracic aorta study dated 11/03/2020 and in keeping with an incidental hamartoma (this has been stable for >10 years and does not require any further action). No significant abnormality is seen in the mediastinum or bones on the limited coverage obtained.
.
Conclusion: Mild burden of coronary artery plaque but no obstructive coronary artery disease (no stenosis greater than 50% luminal diameter reduction).

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8.
NHS Number: XXXXXXXXX
Referring Doctor: XXXXXXX

**20/08/2024 CT Cardiac angiogram coronary**

Clinical History: Exertional chest tightness and risk factors.
.
Report: Two sublingual GTN tablets. IV beta blockers were not required as the patient was on an oral beta blocker with a low resting heart rate. Single beat, volume acquisition using an end-diastolic radiation pulse (&0-80% of the RR interval). Sinus rhythm. Technically high quality images have been obtained of the coronary arteries. DLP 228
.
Left main stem: Normal.
.
LAD: Mixed plaque in the proximal LAD is associated with minimal luminal narrowing (well under 50%). In the mid LAD at the level of the first septal artery origin there is mixed plaque causing positive remodelling and a stenosis of 70-90%. In the distal LAD there is a stenosis due to noncalcified plaque of greater than 90%.The 1st and 2nd second diagonal arteries arise together from the LAD and are diffusely diseased.
.
RCA: Dominant. This is occluded over an approximately 3 cm length involving the proximal to mid vessel. This due to a combination of calcified and noncalcified material. The distal RCA opacifies and no other stenosis is seen.
.
L C X: This is a good sized vessel containing proximal plaque causing mild stenosis only (less than 50% luminal diameter reduction).
.
The non coronary appearances of the heart are normal. There is a well-defined 17 mm x 14 mm lung nodule applied to the pleural surface abutting the left ventricle. This is heterogeneous and contains some low density and probably represents an incidental hamartoma but as it contains no definite calcific or fat density it is not possible to be certain. Therefore lung nodule follow-up is recommended.
.
No other significant abnormality is seen in the lungs, mediastinum or bones on the limited coverage obtained.
.
Conclusion:
1. Occluded dominant right coronary artery.
2.. Mid LAD stenosis of 70-90% and distal LAD stenosis of greater than 90%.
3.. 17 mm well-defined lung nodule in the left lower lobe which is probably an incidental hamartoma but thoracic referral for lung nodule follow-up is recommended to be certain.

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