

Patient Name: Akhilesh Kumar Mishra	Location: MAX SUPER SPECIALITY HOSPITAL - SAKET
Age/Sex: 36/M	IP No.: Admission Type: OutPatient
Max ID: SHPS.0151559	Order Date: 07-NOV-2022
Ref. Doctor: Balbir Singh	Report Date: 07-NOV-2022 04:34 PM

CT Cardiac / Coronary Angio of 07-NOV-2022:

PROCEDURE:

CT coronary angiogram was performed using 80ml of non-ionic contrast at 4ml/sec. The study was performed with ECG gating.

FINDING:

Calcium Score:

Artery	Lesions	Volume/mm ³	Score
LM	1	3.9	3.4
LAD	3	13.4	15.9
CX	5	16.2	12.8
RCA	1	3.2	2.4
Total	10	36.6	34.6

Score type : Agatston equivalent, Threshold: 130HU

Right dominant circulation.

Left Main Artery: LMA is normal in course and calibre.

Left Anterior Descending: LAD type III. Eccentric calcified plaques seen in ostium and proximal LAD causing moderate approx. 50-55% stenosis. Few calcified plaques seen in mid LAD with positive remodelling and insignificant stenosis. Distal LAD shows myocardial bridging. Rest of the LAD is normal in course and calibre.

Diagonals: Diagonal artery is prominent and shows circumferential soft plaque at origin causing severe stenosis with post stenotic dilatation. Rest of the diagonal artery is normal.

Circumflex: LCX shows few mixed calcified plaques and positive remodelling in proximal and mid segment with no significant stenosis. Rest of the LCX is normal in course and calibre.

Obtuse marginal: Obtuse marginal arteries appear prominent and normal in course and calibre. Mild soft plaque seen at OM1 origin rest of the arteries appear normal There is no evidence of any other significant plaque or stenosis.

Right Coronary Artery: RCA appears irregular in outline and slightly ectatic. Mid and distal RCA shows soft plaques causing mild to moderate 30-40% stenosis. Rest of the RCA is normal in course and calibre.

Posterior Left Ventricular: PLV is normal in course and calibre.

Page 1 of 3

(For Interpretation by a Registered Medical Practitioner only)

Patient Name: Akhilesh Kumar Mishra	Location: MAX SUPER SPECIALITY HOSPITAL - SAKET
Age/Sex: 36/M	IP No.: Admission Type: OutPatient
Max ID: SHPS.0151559	Order Date: 07-NOV-2022
Ref. Doctor: Balbir Singh	Report Date: 07-NOV-2022 04:34 PM

Posterior Descending Artery: PDA is normal in course and calibre. There is no evidence of any plaque or stenosis.

There is no inclusion defect in the cardiac chambers.

Lung parenchyma appear normal.

Few pretracheal, paratracheal and subcarinal nodes, measuring 10-12mm noted.

No pleural or pericardial effusion seen.

Aorta and pulmonary arteries appear normal.

Ejection fraction - 58 %

Static myocardial first pass perfusion:

Myocardial enhancement was evaluated during the diastolic phase. CT-MP images were expressed by color maps on the basis of the CT values of the left ventricular myocardium. Warm colors represented hyper-enhanced areas with high CT values and cold colors represented hypo-enhanced areas with low CT values. From the tone of the cold colors and ratio of the cold color area, the hypo-enhanced areas were graded on a three-point scale of mild, moderate and severe

Static myocardial first pass perfusion (MFPP)* :

Static myocardial first pass perfusion (MPI without stress) was evaluated, showed mild partial hypo-perfused areas in the in apical anterior, mid anterior, basal anterior segments and apical septal

Impression: CT angiography of coronary arteries reveal:-

- Right dominant circulation
- Calcium score-34.6
- Eccentric calcified plaques in ostium and proximal LAD causing moderate approx. 50-55% stenosis with few calcified plaques in mid LAD with positive remodelling and insignificant stenosis. Distal LAD shows myocardial bridging.
- LCX shows mild mixed calcified plaques and positive remodelling with insignificant stenosis.
- RCA appears irregular in outline and slightly ectatic with soft plaques in mid and distal RCA causing mild to moderate 30-40% stenosis.
- Soft plaque at origin of diagonal artery D1 causing significant stenosis with post stenotic dilatation.

Adv: Clinical correlation / angiography.

* MFPP: Myocardial enhancement was evaluated during the cardiac cycle. Static CT-MP images were expressed by color maps on the basis of the CT values of the left ventricular myocardium. According to the color overlay scale on the first pass enhancement mask the depicted color red shows the hypoattenuated areas according to the first pass evaluation.

Page 2 of 3

(For Interpretation by a Registered Medical Practitioner only)



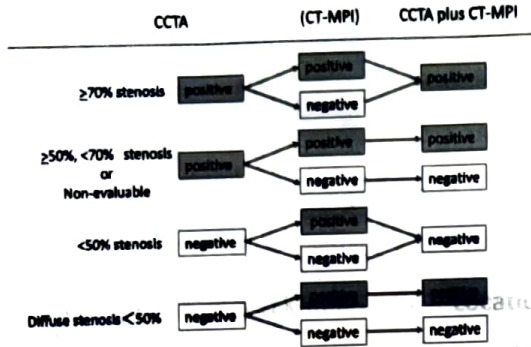
Organization Accredited by
Joint Commission International



H-2007-0004
Feb 6, 22 Feb 5, 26
Since Feb 6, 2007
MC 2714



Patient Name: Akhilesh Kumar Mishra	Location: MAX SUPER SPECIALITY HOSPITAL - SAKET
Age/Sex: 36/M	IP No.: Admission Type: OutPatient
Max ID: SHPS.0151559	Order Date: 07-NOV-2022
Ref. Doctor: Balbir Singh	Report Date: 07-NOV-2022 04:34 PM



Reclassification criteria. Before CT-MPI analysis, non-evaluable with CCTA was defined as positive for stenosis using the following criteria: those with no vessel wall definition owing to marked motion artifacts or heavy calcification that precluded acquisition of diagnostic information.

doi:10.1371/journal.pone.0149170.g001

A. Shas

Dr. Anandamoyee Dhar
Principal Consultant
DMC No.4903

Report Approved / Verified Date & Time: 07-NOV-2022 04:34 PM