Town Hospital

Diagnostic & intervention Radiology department

15276

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MRN	3395	Ref. by	Prof. Dr. Ahmed Rizk	

MDCT Coronary angiography

Technique:

- 128-Slice multidetector CT machine is used.
- Prospective ECG gated non-contrast calcium score.
- Retrospective ECG gated with dose modulation (40-80%) CT CA - 0.625 mm slice thickness- was acquired after injection of 90 cc *Omnipaque*® contrast. Acquired datasets were processed with thin MIP & average (1.5 mm) reformatting, scan coverage from tracheal carina to diaphragm, total DLP = 649 mGy.cm.

Exam Quality: good diagnostic quality of the exam.

Findings

❖ **Coronary arteries:**

- Right dominant coronary circulation.

➢ **LMA:**

- Arising from left coronary sinus with average caliber, and short trunk that bifurcates into LAD & LCx.
- No notable stenosis nor plaques along its course.

➢ **LAD:**

- Average caliber, it runs a long course & wraps around the LV apex.
- LAD gives 1 sizeable diagonal artery.
- It shows para-ostial focal non-calcified plaque exerting mild insignificant stenosis, followed by apparently patent stent with no signs of in stent restenosis.
- **Middle segment shows deep intramyocardial course (depth 4 mm) with significant caliber attenuation (bridge) measuring 5 cm in length.**
- The distal segment is unremarkable.
- D1 is a large branching vessel showing para-ostial non-calcified plaque exerting mild insignificant stenosis, otherwise no notable lesions/stenosis.

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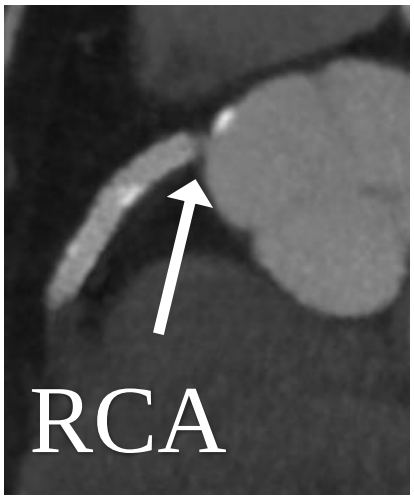
- **LCX:**

  - Average caliber artery that runs a usual course supplying large OM1 and continues as small artery to terminate as small PLB.
  - No notable stenosis nor plaques along its course.
  - OM1 is a large branching artery, it shows ostial mixed plaque exerting mild insignificant stenosis otherwise no notable lesions nor stenosis.

- **RCA:**

  - Dominant vessel, showing average caliber at its origin.
  - Normal course of the vessel, that terminates as average sized PDA and PLB.
  - **It shows ostial non-calcified plaque at the proximal entry of the stent exerting significant stenosis (70~80%) followed by apparently patent stent extending through the middle segment with no evidence of ISR.**
  - The middle segment shows mild atherosclerotic changes without notable lesions/stenosis.
  - The distal segment is unremarkable as well as PDA and PLB.



- **Heart:**
  - Normal anatomy of heart and great vessels.
  - **Atria:** both are of average size with no filling defects, both atrial appendages are free.
  - **Ventricles:** no filling defects, **the LV is dilated measuring 6 cm in diameter, it shows significant myocardial thinning involving the middle to distal anterior and anteroseptal/septal wall as well as the apex proper.**
- **Aortic root:**
  - Tricuspid with average thickness, no significant calcifications.
  - Visualized parts of aorta are unremarkable.
- **Pulmonary artery:**
  - Average pulmonary valve thickness.
  - No evidence of pulmonary thrombosis in the visualized segments.
- **Pulmonary venous drainage:**
  - Normal pulmonary venous drainage with no APVR.

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Conclusion:

- ✓ **Right dominant coronary circulation, CAD RADS 4A /S:**
  - **Ostial RCA significant stenosis (70~80%), followed by apparently patent proximal to middle segment stent, & no ISR.**
  - **Proximal LAD mild insignificant plaque followed by apparently patent stent.**
  - **Middle LAD myocardial bridge with significant caliber attenuation for further evaluation.**
  - **Large OM1 mild insignificant atherosclerotic changes.**
  - **No other notable lesions/stenosis.**
- ✓ **Dilated LV with remarkable thinning along the middle to distal LAD territory for further viability evaluation and clinical correlation.**

Regards,

Mustafa Heidar

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