Finalist: Myocardial Perfusion

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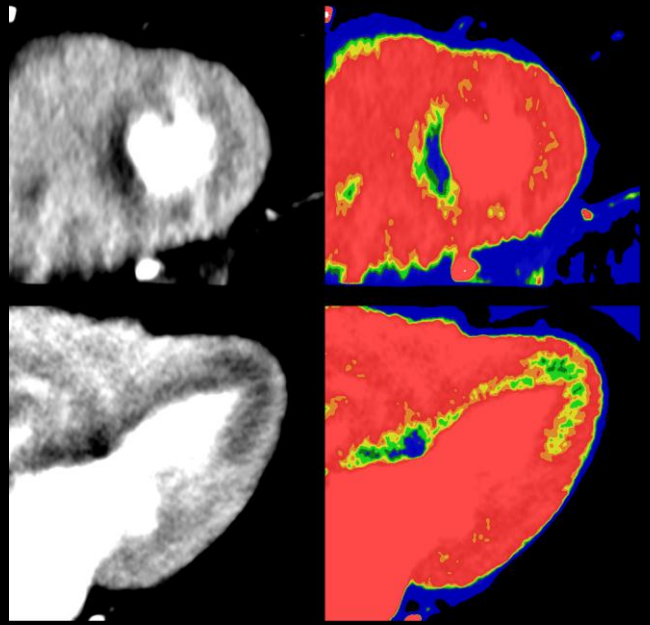
“Due to detection of myocardial ischemic area in preoperative evaluation, Perfusion CT with IMR is able to detect it. We think that it might be possible to diagnosis with high accuracy, because Cardiac CT is able to assess morphology and function simultaneously. IMR can be used to conduct dynamic perfusion study with low radiation dose. It is possible to enhance contrast between ischemic and normal myocardium by using low-kV technique with IMR.



Parameters:
Scanner: iCT
kVp: 80
Dose: 4.9 mSv

*Results from case studies are not predictive of results in other cases. Results in other cases may vary.

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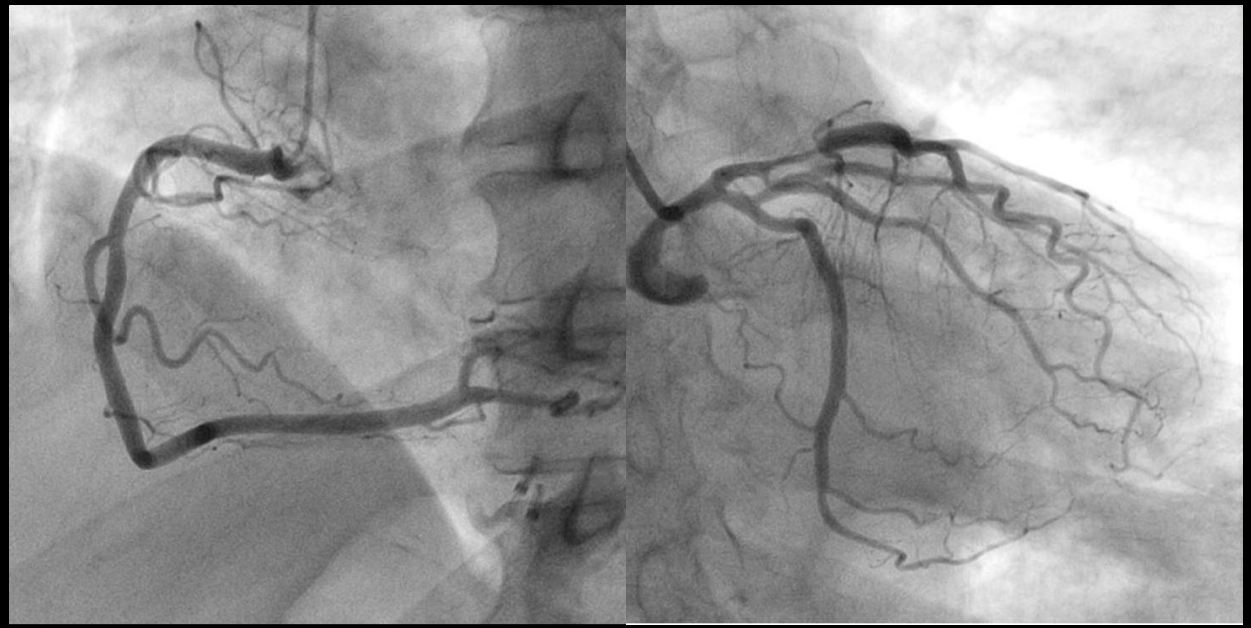

Fig.1: Coronary Angiography showing coronary stenosis at LAD#7 (Left: RCA, Right: LCA)

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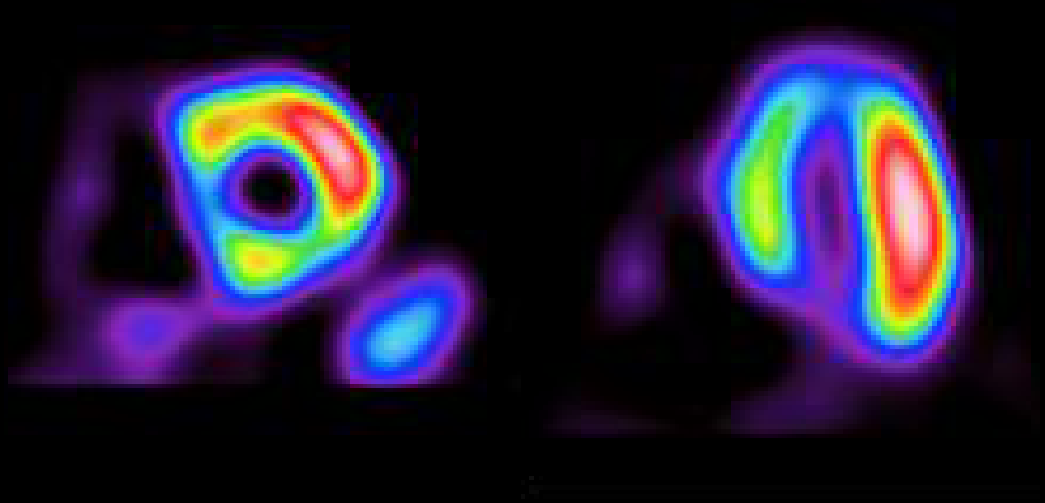

Fig.2: Cardiac scintigraphy showing perfusion defect at septum (Left: short axis, Right: vertical long axis)

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*Play Video

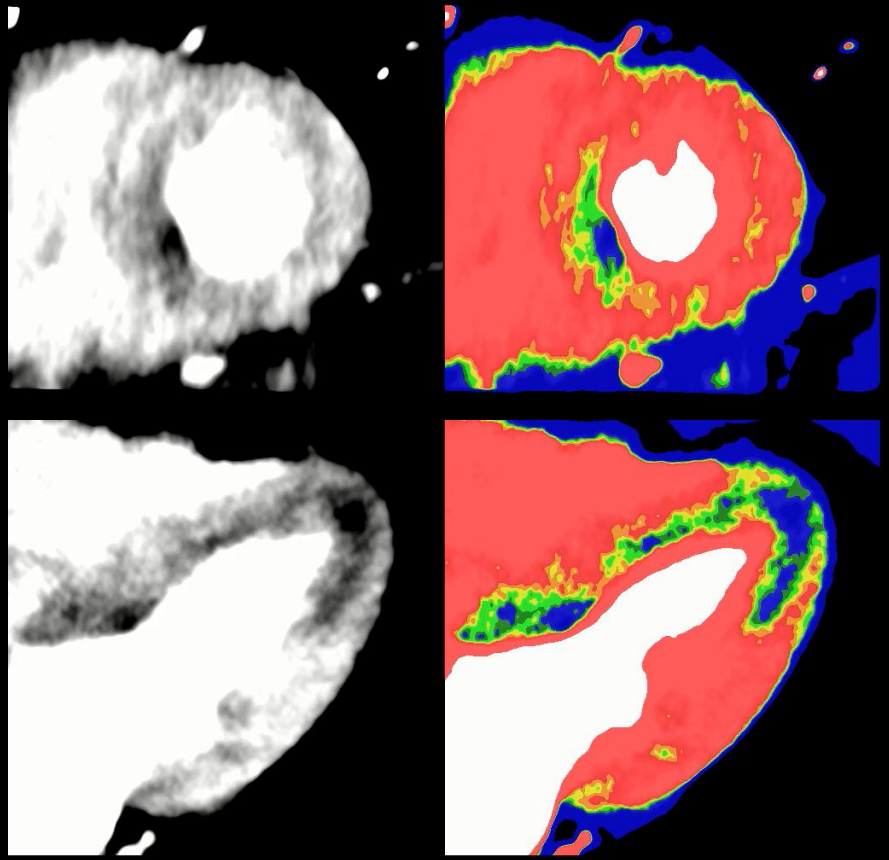

Fig.3: Dynamic Myocardium perfusion CT showing lower enhanced area at septum (movie file : kindly click on this movie)

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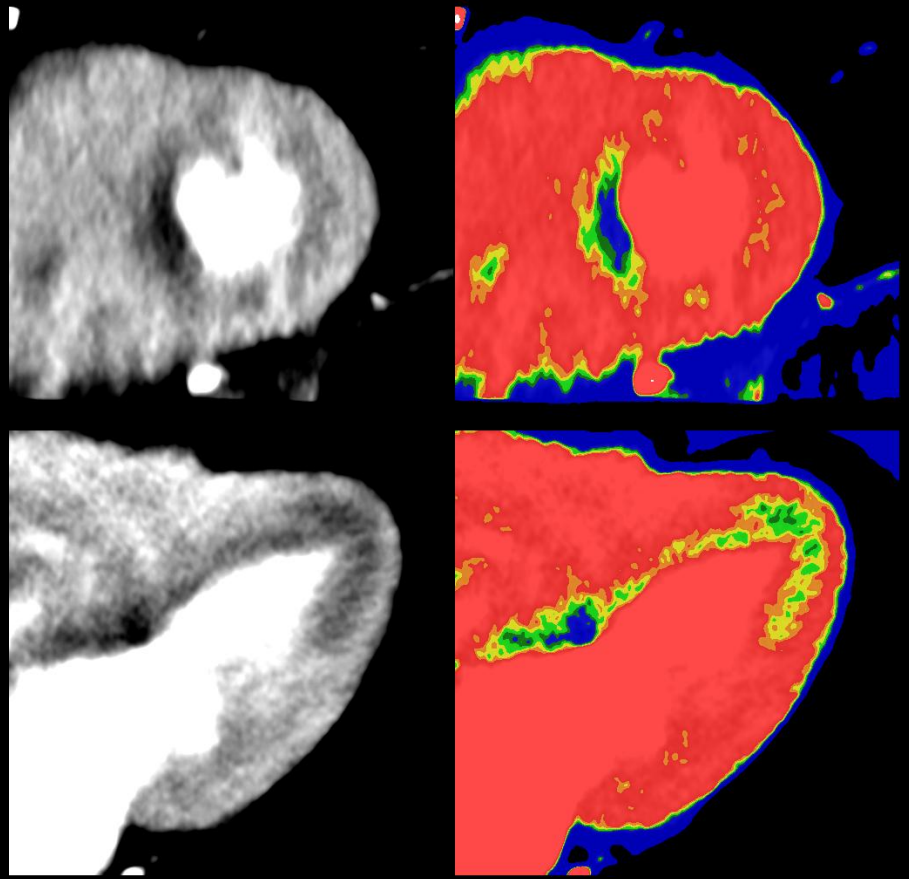

Fig.4: Myocardium single-shot CT image showing lower enhanced area at septal area

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