Courtesy

Ruby Hall Clinic, Pune, India Dr. J.S. Hiremath, M.D.

Symptoms

The patient was admitted for an episode that was suggestive of a myocardial infarction.

Patient history

The patient is a 42 year-old male who suffered from a high lateral wall myocardial infarction (MI) eight years ago.

System information

Ruby Hall uses a Philips Allura Xper FD10 cath lab. The Allura Xper FD10 features advanced applications, such as Rotational Coronary Angiography to support clinical decision strategies.

Findings

The angiogram revealed the same moderate signs of disease in the diagonal artery as he had exhibited in the past. Subsequently, a Coronary Rotational Angiogram was performed, which revealed that the OM lesion was very critical. This became clear because a non-conventional angulation was used.

Conclusion

Dr. Hiremath says, "Conventional static views did not reveal the critical nature of the lesion, whereas the rotational scan showed that the lesion was critical. This completely changed our treatment strategy."

Seeing more to enhance diagnostic confidence

Philips Allura Xper FD10 rotational scan

reveals critical coronary lesion

The patient

The patient is a 42 year-old male who suffered from a high lateral wall myocardial infarction (MI) eight years ago. At that time, he was found to have isolated diagonal artery disease. He was given medical treatment which produced good results for eight years. He is a non-diabetic, non-hypertensive, chronic tobacco chewer and has a family history of ischemic heart disease. His lipid levels are normal.



Current case

The patient was admitted for an episode that was suggestive of a myocardial infarction. His cardiac enzymes were elevated and his Troponin T test was positive. He was found to have ST depression in T inversion in V4, V5, V6. Because of this, a coronary angiography was performed.



Dr. J. S. Hiremath, M.D.

Findings

The angiogram revealed the same moderate signs of disease in the diagonal artery as he had exhibited in the past. The left anterior descending artery, which was previously normal, now showed a 50% deterioration. These two arteries were clearly not the cause of this episode. The non-dominant, but large circumflex artery, continues into a large obtuse marginal (OM) branch. In the conventional views (RAO caudal, AP cranial, LAO cranial & spider), a lesion was identified in the OM branch. It appeared to be thrombotic and non-critical (less than 50%). "We initially thought of carrying out a conservative treatment because of the non-critical nature of the coronary artery disease," says J.S. Hiremath, M.D. "However, we subsequently performed a Coronary Rotational Angiogram which revealed that the OM lesion was very critical. The only reason that this became clear was because we used a non-conventional angulation (Shallow LAO, Shallow cranial)."



Treatment

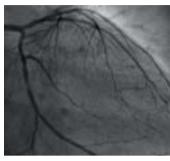
This finding from the rotational angiogram completely changed the patient management. The rotational angiography clearly clinched the diagnosis in favor of a more critical lesion and changed the treatment for this young man from conservative management to PCI with stent. After the stent placement, the flow in the OM was restored.

Hospital information

The Ruby Hall Clinic is located in Pune, India and is one of the leading medical institutions in India. It is a multi-specialty hospital that is dedicated to diagnosis, treatment and research related to various diseases.

Rotational Scan provides 3D impressions of the coronary arteries with just one contrast injection. In one sweep it provides superb viewing angles.

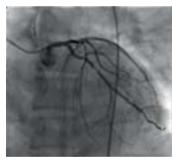
Clinical photos are supplied courtesy of Ruby Hall Clinic in Pune, India.



Normal static projection shows non-critical lesion









Rotational scan shows same lesion to be critical under non-conventional projection





Dilatation and stent placement result in restored flow



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www.medical.philips.com medical@philips.com fax: +31 40 27 64 887

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