Thallium-201 myocardial scintigraphic evidence of ischemia in a patient with angina pectoris and normal coronary arteriogram: significance of thallium-201 washout analysis

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We present a patient who had anginal pain and an abnormal exercise electrocardiogram but a normal coronary arteriogram. We thought that myocardial ischemia was responsible for this symptom in view of the exercise left ventriculogram, exercise thallium-201 myocardial scintigraphy and effect of nitroglycerin on the anginal pain. The left ventriculogram at rest was normal but exercise worsened the entire left ventricular wall motion. Exercise thallium-201 myocardial images showed minimal reduction of radio-activity in the anterior, apical, antero-lateral and postero-lateral wall. Myocardial thallium-201 washout analysis revealed washout abnormalities all over the left ventricular myocardium similar to those of triple vessel disease, supporting the exercise left ventriculographic finding. Myocardial thallium-201 washout analysis as well as the visual method should be performed in patients with angina pectoris and normal coronary arteriograms.

Key words: Angina pectoris, Normal coronary arteriogram, Thallium-201 myocardial scintigraphy