

Clinical Case #1

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Clinical Case #1

History

73-year-old man, arterial hypertension treated with ACE-inhibitors + diuretics, hypercholesterolemia treated with statins

Body mass index= 27 Kg/m²

Non cardiac-related symptoms

Cardiology visit because of incidental finding of an abnormal ECG during non-cardiac surgery (prostatectomy) preparation tests

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Physical examination

Blood pressure= 170/105 mmHg

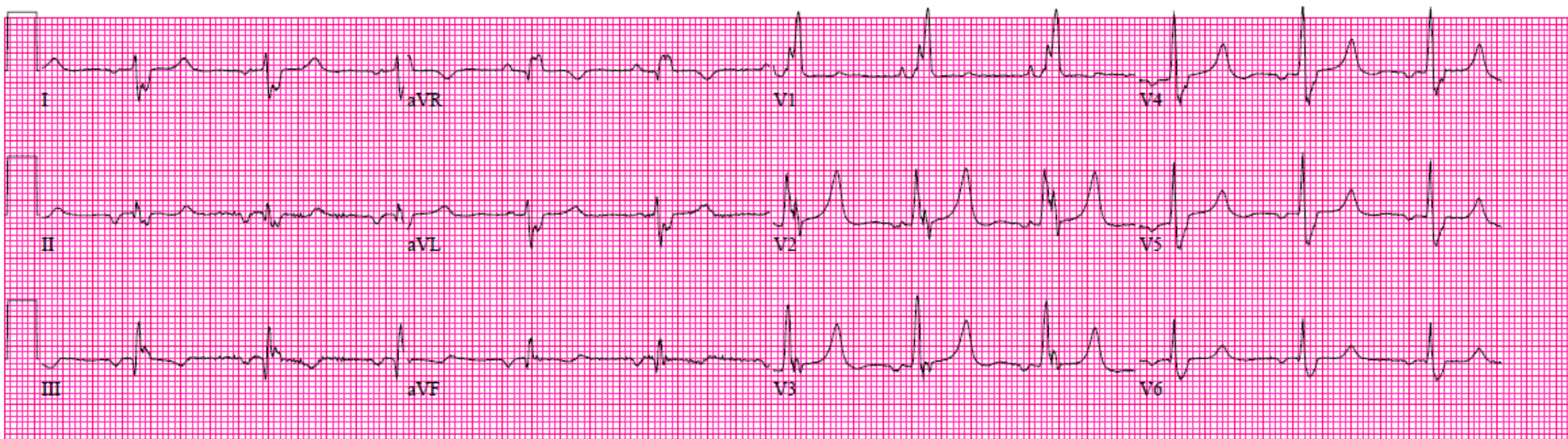
Cardiac auscultation: regular cardiac rhythm (74 bpm), no murmur, S4

Clear lungs

Arterial pulses were symmetric and of normal amplitude

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Electrocardiogram



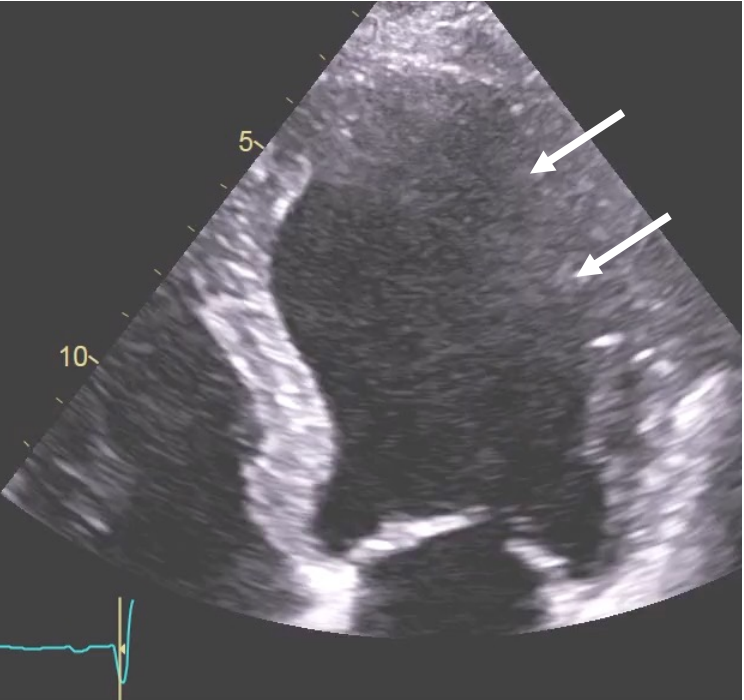
Sinus rhythm, 72 bpm

Right bundle branch block

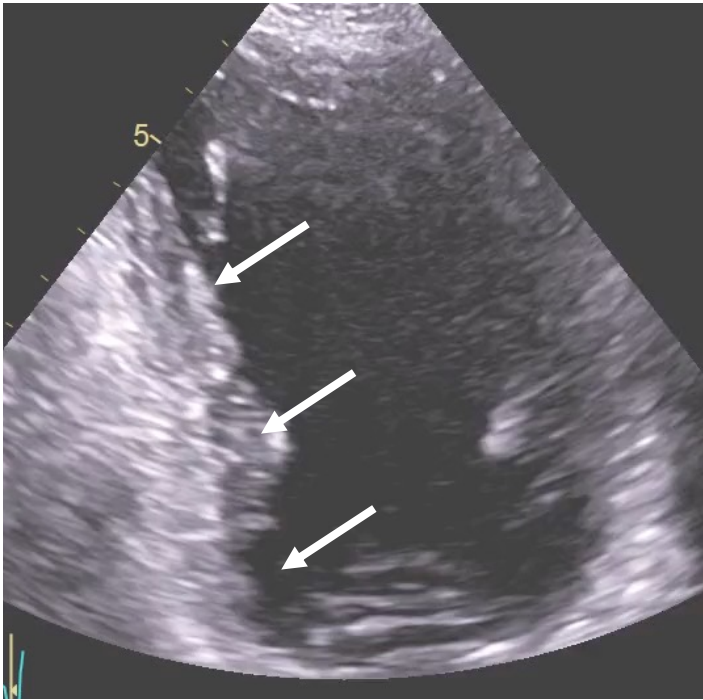
Pathologic Q waves in inferior leads

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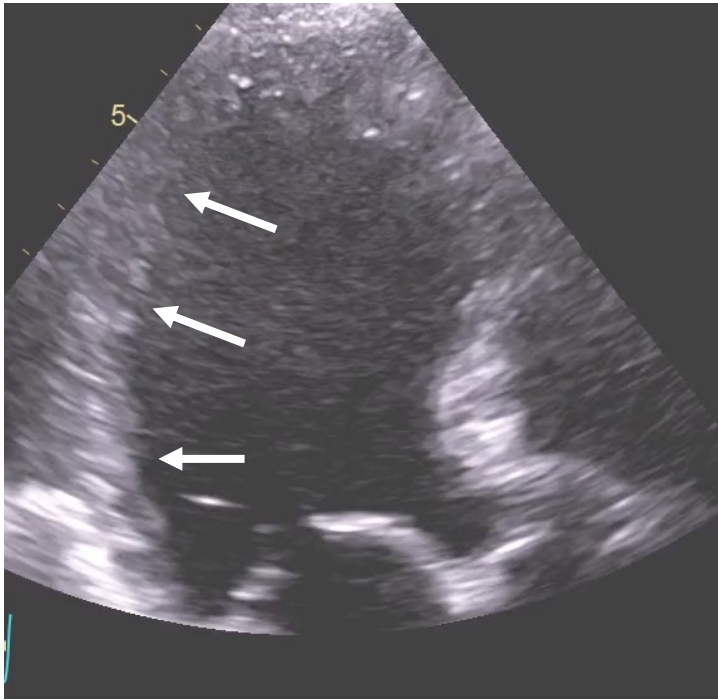
Echocardiogram



4-chamber view



2-chamber view



Apical long-axis view

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Which is the most likely diagnosis?

- Hypertensive heart disease
- Chronic coronary syndrome
- Dilated cardiomyopathy
- Acute coronary syndrome

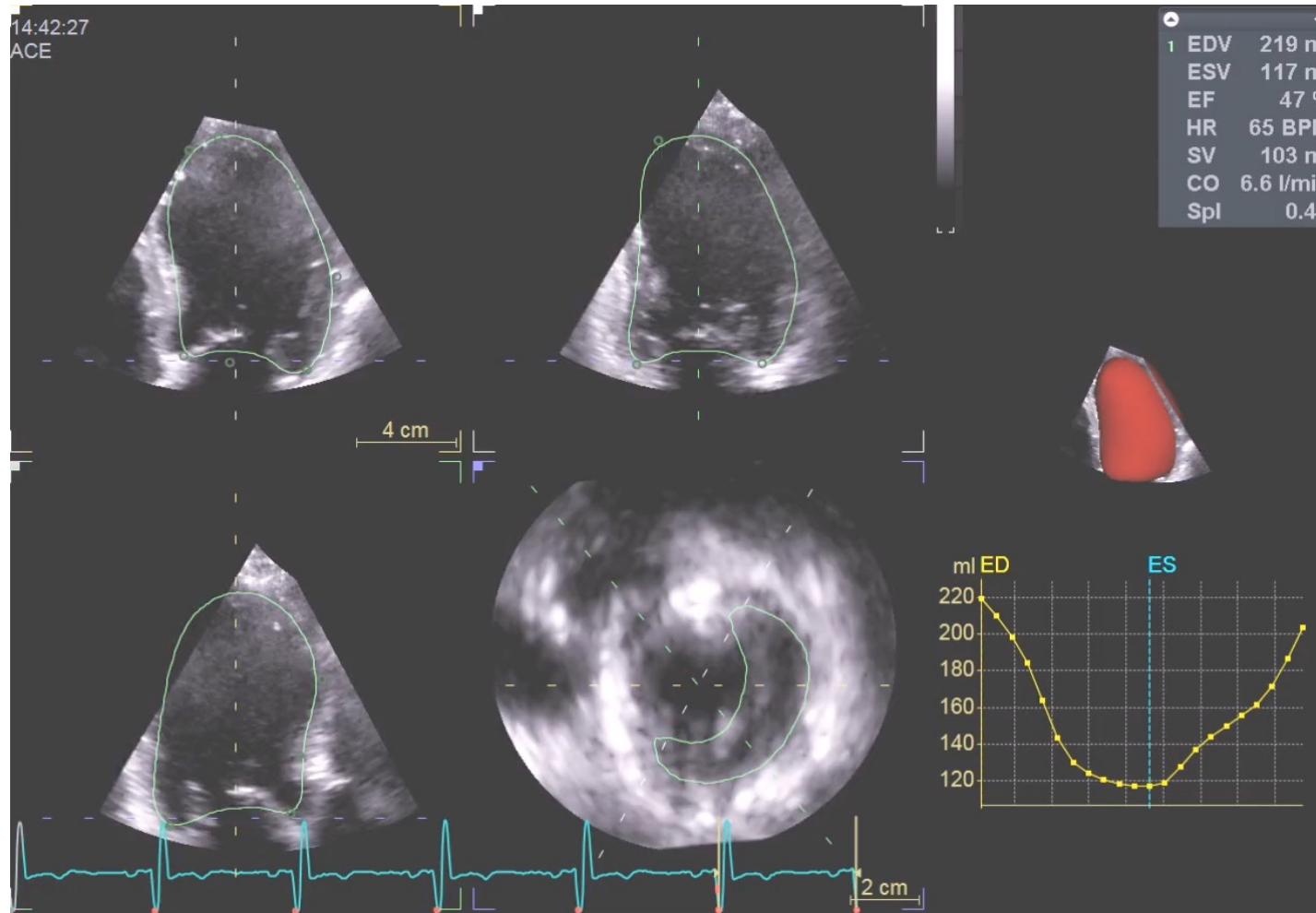
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Which is the likelihood of coronary artery disease?

- Low
- Moderate
- High
- Undetermined

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Echocardiogram



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How is left ventricular function?

- Normal
- Mildly reduced
- Moderately reduced
- Severely reduced

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Which is the next diagnostic test?

- Blood test to dose cardiac biomarkers
- Computed Tomography angiography
- Invasive coronary angiography
- Imaging test of inducible myocardial ischemia

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Most likely diagnosis: chronic coronary syndromes

6 different clinical scenarios:

- (i) patients with suspected CAD and 'stable' anginal symptoms, and/or dyspnoea;
- (ii) patients with new onset of HF or LV dysfunction and suspected CAD;
- (iii) asymptomatic and symptomatic patients with stabilized symptoms <1 year after an ACS or patients with recent revascularization;
- (iv) asymptomatic and symptomatic patients >1 year after initial diagnosis or revascularization;
- (v) patients with angina and suspected vasospastic or microvascular disease;
- (vi) asymptomatic subjects in whom CAD is detected at screening.

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Pre-test probability of coronary artery disease

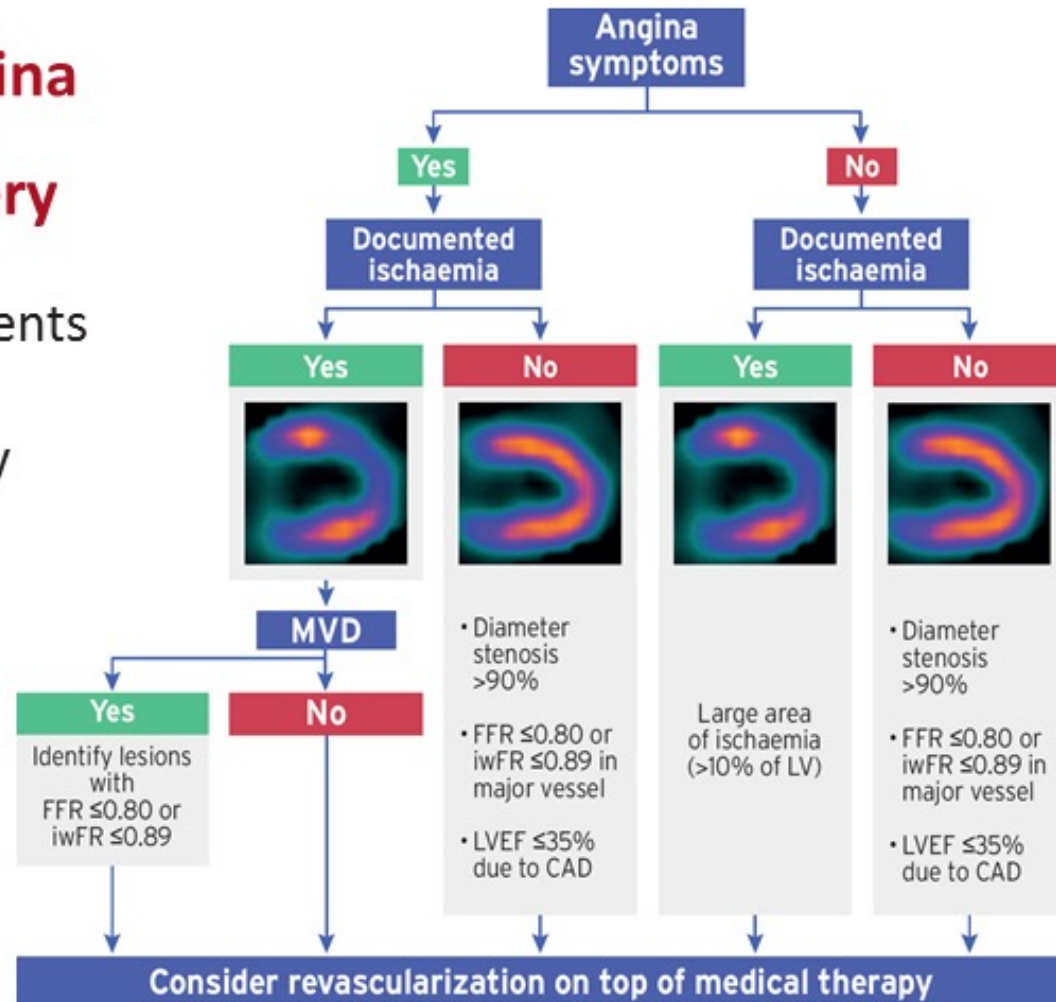
Age	Typical		Atypical		Non-anginal		Dyspnoea ^a	
	M	W	M	W	M	W	M	W
30–39	3%	5%	4%	3%	1%	1%	0%	3%
40–49	22%	10%	10%	6%	3%	2%	12%	3%
50–59	32%	13%	17%	6%	11%	3%	20%	9%
60–69	44%	16%	26%	11%	22%	6%	27%	14%
70+	52%	27%	34%	19%	24%	10%	32%	12%

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Treatment

Patients with angina and/or dyspnoea and coronary artery disease

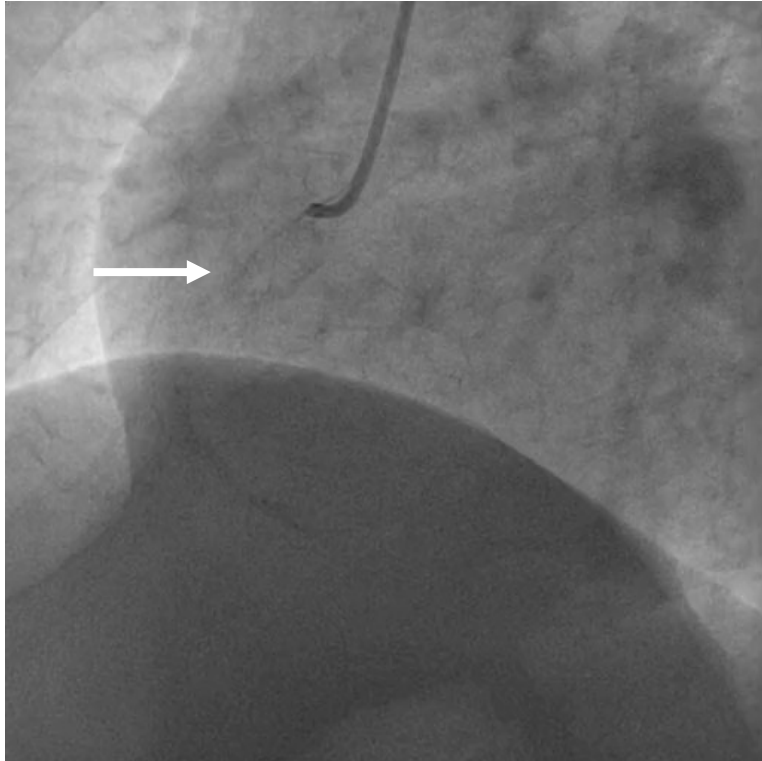
Decision tree for patients undergoing invasive coronary angiography



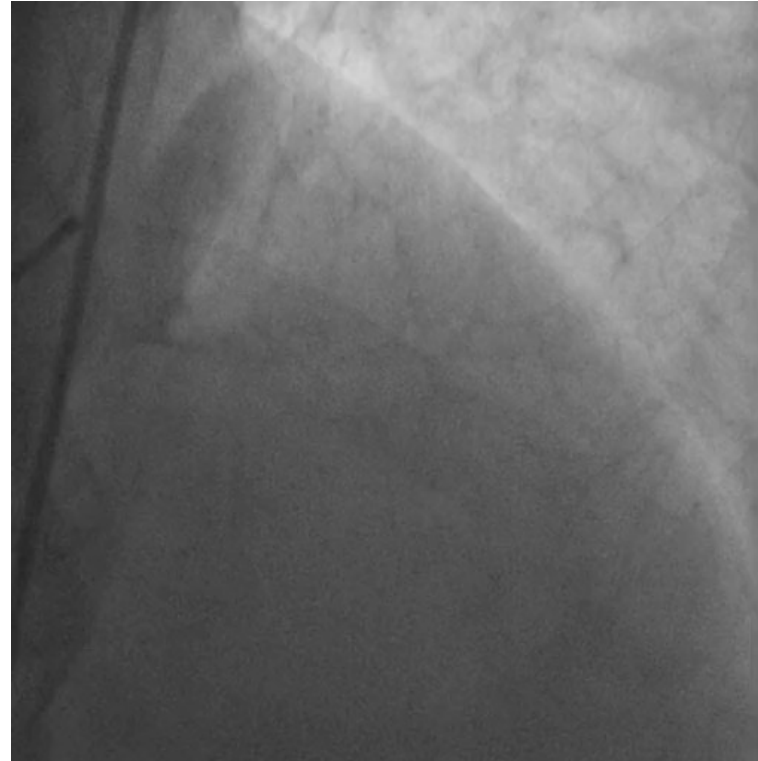
CAD = coronary artery disease;
FFR = fractional flow reserve;
iwFR = instantaneous wave-free ratio;
LV = left ventricle;
LVEF = left ventricular ejection fraction;
MVD = multivessel disease.

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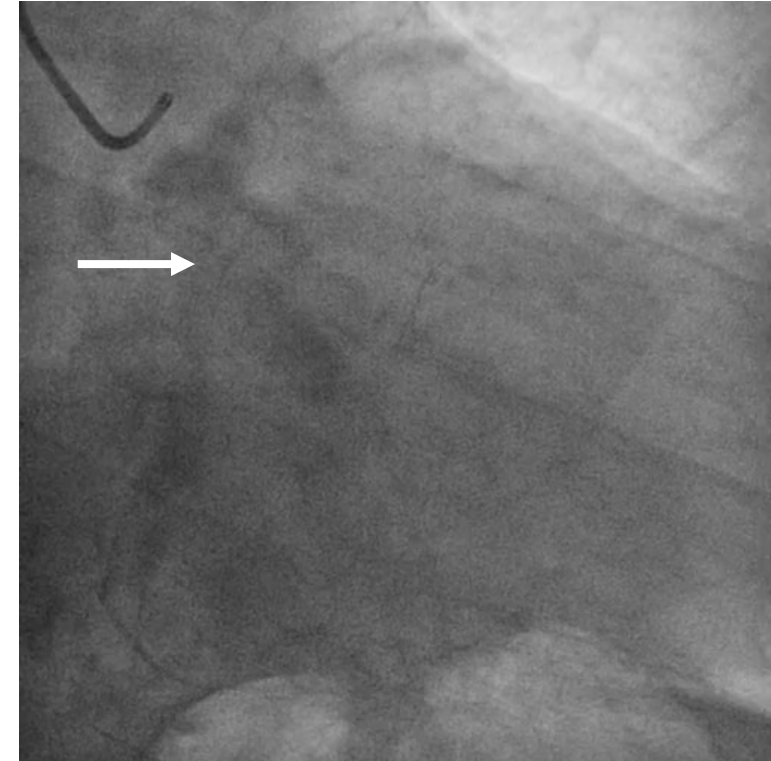
Invasive coronary angiography (two-vessel disease)



Right coronary artery



Left anterior descending branch



Circumflex branch

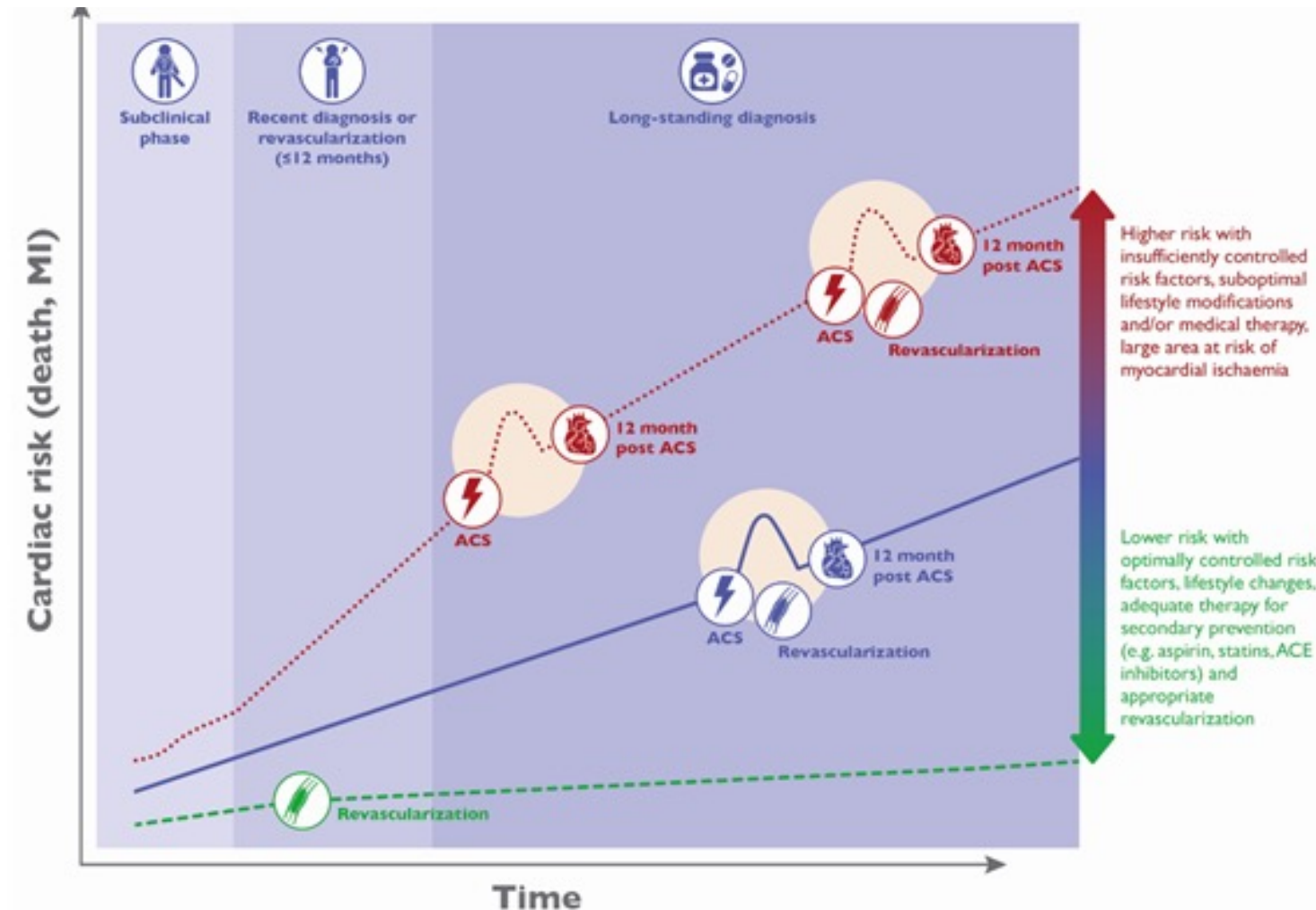
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Any other treatment measure to adopt ?

- CT angiography after 6 months to check the results
- Control cardiovascular risk factors and change lifestyle
- Imaging test of inducible ischemia at 6 months
- All the previous

Ischemic Heart Disease

Natural history of chronic coronary syndromes



Acute Coronary Syndromes I

THANK YOU!



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