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Cold hands, headache and chest pain: a winter disease?

Case report

A 57-year-old woman was scheduled to undergo elective invasive coronary angiography after having recurrent chest pain on exertion during the last four winter months. As only cardiovascular risk factors, she was known for current smoking and was on ramipril to treat arterial hypertension. Furthermore, she suffered from Raynaud's syndrome and migraine. She was referred for coronary angiography after a positive treadmill test.

The coronary angiography was performed after having given two pushes of sublingual liquid nitroglycerin and showed a tightly stenosis (fig. 1A, arrow) of the ostium of left main coronary artery (LM) with drop of pressure due to catheter's wedging position. The left anterior descending artery (LAD) and the circumflex artery (LCX) were found diffusely narrowed. The right coronary artery and the systolic left ventricular function were normal. After administration of a third push of sublingual li-

quid nitroglycerin (0,4 mg glyceroltrinitrate) complete resolution of the stenosis could be observed (fig. 1B), which establishes the diagnosis of vasospastic angina. The patient was discharged on the next day on calcium channel blockers, long-acting nitrates in reserve.

Coronary artery spasm is usually defined as a focal reversible constriction of a coronary artery segment causing myocardial ischaemia by coronary blood flow restriction. Generally coronary vasospasm may occur spontaneously or could be induced, either physically by catheter [1], physiological manoeuvres (hyperventilation) [2], or by pharmacological agents [3]. The mechanism of coronary spasm remains unclear but endothelial dysfunction seems to be the main triggering factor in all causes. A high prevalence of migraine and Raynaud's phenomenon has been reported in such patients [4].

References

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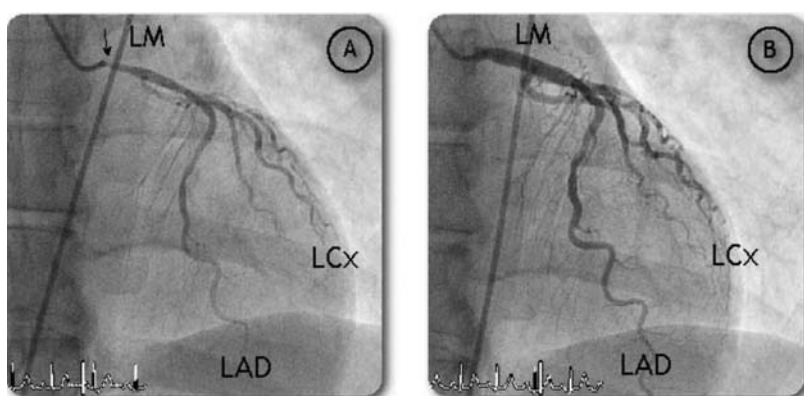


Figure 1

A Coronary angiogram anteroposterior view demonstrating a severe vasospasm of left main coronary artery (LM), circumflex artery (LCX) and left anterior descending artery (LAD).
B Same projection, after application of sublingual nitroglycerine.

There is no conflict of interest.

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