16 [10074]

Acute myocardial infarction of septal branch due to vasospastic angina

A 76-year-old woman with dyslipidemia was admitted to our hospital because of chest and back pain with radiation to neck. 12-leads electrocardiogram showed ST elevation in V1-4 leads and troponin-T was positive. Ultrasound echocardiogram showed severe wall motion abnormality at the anteroseptal region. Coronary angiography (CAG) showed occlusion of major septal branch with collaterals from right coronary artery. Other significant stenosis was not existed. Although she had mild chest pain, we did not perform percutaneous coronary intervention to the septal branch because of her stable hemodynamic condition. Myocardial scintigram showed perfusion defect at the septal region without myocardial viability. A week later, we underwent CAG reevaluation with coronary spasm provocation test. Severe coronary spasm was induced at left anterior descending (LAD) with reproducible chest pain and ST elevation. Furthermore, the focal stenosis was existed at the ostium of septal branch. Finally, we confirmed diagnosis of vasospastic angina, and prescribed several vasodilators such as calcium antagonist, isosorbide dinitrate, and nicorandil. She was free from chest pain after the medications. We had experienced a case of acute myocardial infarction of sole septal branch. It was suggested that the cause of myocardial infarction was severe spasm of LAD and focal stenosis at the ostium of septal branch.