

A case of myocardial ischemia due to compression of the left main trunk by a large unruptured ascending aortic aneurysm

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Most cases of unruptured thoracic aortic aneurysm (TAA) are asymptomatic. Compression of the left main trunk (LMT) is an unusual manifestation of the disease that can cause angina, myocardial infarction and death. We report a rare case of an unruptured TAA that compressed the LMT and led to myocardial ischemia accompanied by angina. A 93-year-old woman was admitted to our hospital due to chest oppression at rest. Electrocardiogram revealed the ST segment depressions in leads V2-6. Transthoracic echocardiogram showed diffuse hypokinesis and an ejection fraction of 52%. Emergent coronary angiography showed 90% flat stenosis lesion in the LMT and aortic angiography revealed the presence of a saccular aneurysm on the dorsal side of the thoracic aorta. We diagnosed her as acute coronary syndrome due to compression of the LMT by the aneurysm. Although surgery was appropriate, we chose the treatment with percutaneous coronary intervention (PCI) to LMT because the patient's age was very high and we have determined there is no indication for surgery. Intravascular ultrasound demonstrated a flat stenosis in LMT without plaque. We deployed sirolimus eluting stent to LMT and acquired TIMI 3 flow. The next day we underwent computed tomography angiography and confirmed that a 70mm aneurysm was in contact with the stent placement portion. The patient was discharged home without angina on postoperative day 7. Two years has elapsed after PCI and the patient has been attending an outpatient department.