

中文題目: 案例報告-冠狀動脈痙攣患者之一系列心電圖變化

英文題目: Sequential atypical change in ECG presentation of a patient with vasospastic angina - A case report

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Background: Vasospastic angina, previous referred to as Prinzmetal angina or variant angina, is described as typical chest pain induced by epicardial coronary artery abnormal vasoconstriction. The characteristic of vasospastic angina is described as spontaneous rest pain, diurnal peak of attack, marked relieved by nitroglycerin, ST-T segment change on electrocardiography and non-significant coronary artery stenosis defined on angiography.

Case report: This is a 67 years old male suffered from typical chest pain and suspected inferior wall myocardial infarction complicated complete atrio-ventricular block according to initial ECG presentation with lead II, III, aVF ST-T elevation and A-V dissociation. However, followed sequential ECG fifty minutes later showed totally resolved previous ST-T segment change but new ST-T segment elevation noted over lead V2~V4 pointed to antero-septal wall infarction without revascularization yet. Percutaneous coronary angiography revealed no critical stenosis later. After complete resolving symptoms under calcium-channel blocker and nitrate management, followed ECK disclosed no remarkable ST-T.

Discussion: For vasospastic angina, it is important to prevent aspirin or non-selective β -blocker use for the possible vasospastic effect via decreasing vasodilator substance of prostaglandin and block of vasodilatory effect of β -2 receptor, respectively. Instead, it's very effective with calcium channel blocker delivery in vasospastic angina for suppressing Ca^{2+} inflow to vascular smooth muscle cell and subsequent preventing vasospasm. Nitrates also activate guanylate cyclase to increase intra-cellular cGMP via NO releasing and consequently relax the smooth muscle. Smoking cessation, alcohol abstinence, adequate control of blood pressure and serum sugar level, correction of dyslipidemia, prevention physical and emotional stress and avoiding illicit substance use are strongly recommended. Statin, nicorandil and renin-angiotensin-aldosterone-system antagonist exerted potential benefit in several studies. Rho-kinase is recommended in intractable vasospastic angina.

Conference:

1. Guidelines for Diagnosis and Treatment of Patients With Vasospastic Angina, *Circulation Journal*, 2013