

中文題目：使用冠狀動脈支架治療頑固型變異型心絞痛

英文題目：Coronary artery stenting in patient with medical refractory vasospastic angina

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## **Introduction**

Vasospastic angina, which was previously referred to as Prinzmetal or variant angina, is characterized by episodes of rest angina that rapidly respond to short-acting nitrates and are attributable to coronary artery vasospasm. Herein, we presented as case of recurrent vasospastic angina which was refractory to medical treatment. Coronary artery stenting was performed to the patient.

## **Case Presentation**

A 56-year-old man with a history of variant angina presented with sudden onset of anterior chest pain radiated to jaw, which could be relieved by sublingual nitroglycerin. 12-Lead EKG showed lead II, III, aVF ST elevation. Percutaneous coronary intervention was performed, which revealed 75% stenosis of right coronary artery. Bare metal stents was placed over right coronary artery. After percutaneous coronary intervention, his symptoms improved initially but recurred afterward. 12-Lead also showed lead II, III, aVF ST elevation. His symptoms and 12-Lead could be relieved by sublingual nitroglycerin. Oral Diltiazem was then prescribed and the patient was discharged smoothly.

## **Discussion**

To our knowledge, calcium channel blockers are the first-line therapy for variant angina. The long-acting nitrates are also effective in alleviating symptoms. However, coronary artery stenting might be an alternative strategy to deal with vasospastic angina.

Martí et al. presented a case series that coronary stent was performed in five patients with variant angina refractory to medical treatment. 3 of five remained asymptomatic during follow-up. Nevertheless, spasm recurrences may occur in other segments of the treated artery, probably due to the diffuse nature of the disease. Chu et al. conducted a consecutive single-center analysis to demonstrate that coronary stenting for severe refractory coronary vasospasm was effective and without serious complications. In their study, coronary stenting was performed in 21 patients refractory to medical treatment. Among them, the spasm site was located in the right coronary artery in 16 (76.2%) and in the left anterior descending artery in the remaining 5 (23.8%) patients. During the follow-up period, 1 of the 21 patients with stents developed recurrent episodes of variant angina, 5 patients had occasional chest

pain, and the other 15 were asymptomatic.

According to our case and other case series, coronary artery stenting is a promising treatment option for refractory vasospastic angina. However, calcium channel blockers might still be needed after stenting. Further randomized controlled trials with a large population are needed to clarify the advantage of coronary stenting.