

# Clinical Characteristics and Major Adverse Cardiovascular Events in Diabetic and Non-Diabetic Patients with Vasospastic Angina [Letter]

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## Dear editor

Vasospastic angina (VSA) is an angina pectoris due to severe segmental or diffuse coronary artery spasm. At present, although nitrate drugs and calcium blockers help to improve patients' symptoms, the etiology and targeted treatment of the disease are still not clear, and the clinical prognosis of some VSA patients is still poor. The clinical background and prognostic impact of diabetes mellitus (DM) on VSA remain unclear. We recently read an article entitled "Clinical Characteristics and Major Adverse Cardiovascular Events in Diabetic and Non-Diabetic Patients with Vasospastic Angina", it was published in the journal of Diabetes, Metabolic Syndrome and Obesity.<sup>1</sup>

We were interested in the study conducted by Hiroki Teragawa et al. They conducted a retrospective study and the investigators investigated whether VSA patients differ due to the presence of diabetes. They were included 272 Japanese patients with VSA diagnosed by coronary angiography (CAG) and the spasm provocation test (SPT). Their study found that no significant differences in urinary albumin levels and peripheral vascular function were between groups. On CAG, atherosclerotic lesions were observed significantly more frequently in the DM group (63% vs 46%;  $P = 0.028$ ). Results of SPT showed a trend toward fewer focal spasms in the DM group (24% vs 39%;  $P = 0.072$ ). No significant differences in MACE were noted between groups in the primary analysis of DM, whereas sub-analyses of focal spasms showed lower MACE-free survival in the DM group ( $P = 0.042$ ).

However, we believe that there are other aspects that deserve attention.

First, it is recommended that factors related to VSA prognosis in both groups be included in the analysis. It has been reported in the literature that smoking, oral beta blockers, no use of calcium channel blockers, alcohol intake, variant angina, and coronary angiography (CAG) findings such as atherosclerotic lesions, multiple vasospasm (MVS), and focal spasm are significantly associated with vasospasm.<sup>2-4</sup> VSA was not associated with total cholesterol (TC), high-density lipoprotein cholesterol (HDL-C), triglyceride (TG), low-density lipoprotein cholesterol (LDL-C), diabetes, or body mass index. Patients with hypertension have a lower risk of vasospastic angina. Therefore, it is suggested that factors related to the prognosis of VSA should be analyzed as variables.

Second, it is recommended that all selected patients discontinue the use of calcium,  $\beta$ -blockers and long-acting nitroglycerin until at least 48 hours. Patients in the DM group can also be further grouped according to the level of glycemic control and the duration of diabetes to explore the prognostic impact on VSA.

Because the etiology and targeted treatment of VSA are still unclear, and the clinical prognosis of some patients with VSA is poor, it is suggested to continue to carry out relevant research on the treatment of VSA.

In conclusion, solving these problems will improve the reliability of research results and their clinical application prospects.

## Disclosure

The author reports no conflicts of interest in this communication.

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