Prevalence and Current Practice of Vasospastic Angina in Japan

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Coronary artery spasm plays an important role in the pathogenesis of a wide variety of ischemic heart diseases, including stable and unstable angina, myocardial infarction and sudden cardiac death, especially in the Japanese population. The prevalence of coronary spasm is higher in Japan than in Western countries, although Japanese patients do not exhibit classical coronary risk factors except for the higher prevalence of smoking. In addition, polymorphisms of eNOS have been suggested as a possible risk factor for the spasm. Long-term prognosis is better in the Japanese patients than in the western patients in general, for which relatively low incidence of organic coronary artery disease and sufficient medical treatment with Ca-channel blockers may be involved. Accumulating evidence suggests that Rho-kinase, an effector of the small GTP-binding protein Rho, plays an important role in vascular smooth muscle hypercontraction and thus could be a novel therapeutic target for coronary spasm. Recently, altered vasomotor function and late thrombosis after drug-eluting stent implantation and the indication of implantable cardioverter defibrillator for secondary prevention of sudden cardiac death due to refractory coronary spasm have attracted much attention in cardiovascular medicine. Thus, coronary spasm has been emerging again as an important clinical issue in the current era with new devices in Japan.