## **Summary**

## Clinical Usefulness of <sup>123</sup>I-BMIPP Myocardial SPECT in Patient with Microvascular Spasm: A Case Report

Kazuki Ito\*, Noriyuki Kinoshita\*, Hidekazu Irie\*, Masahiro Koide\*, Hirokazu Yokoi\*, Takuya Taniguchi\*, Reo Nakamura\*, Tetsuo Hashimoto\*, Shunnichi Тамакі\*, Takahisa Sawada\*\*, Akihiro Azuma\*\* and Hiroaki Matsubara\*\*

\*Department of Cardiology, Kouseikai Takeda Hospital
\*\*Department of Cardiology, Kyoto Prefectural University of Medicine

This patient was a 64-year-old man with chest pain at rest. An electrocardiogram showed depression of the ST segment in  $V_2$ – $V_5$  leads during chest pain. <sup>123</sup>I-BMIPP myocardial SPECT revealed reduced uptake in the apex. Coronary angiographies revealed severely delayed filling of contrast medium without narrowing of epicardial coronary arteries. An intracoronary infusion of isosorbide dinitrate did not improve the delayed filling of contrast medium or the ST segment depression. After an intracoronary infusion of nicorandil, coronary arterial flows were remarkably improved, chest symptoms disappeared, and electro-

cardiographic findings were improved. Left ventriculography showed severe hypokinesis in the apex. After the medication with nicorandil, reduced <sup>123</sup>I-BMIPP myocardial uptake and reduced wall motion on echocardiography were improved. These findings suggest that myocardial ischemia in this case might be explained as having been caused by microcirculation disturbance.

**Key words:** <sup>123</sup>I-BMIPP, Coronary microcirculation disturbance, Delayed filling of contrast medium, Nicorandil.