

Absent myocardial I-123 BMIPP uptake in a family

Eui-Hyo HWANG,* Akira YAMASHITA,** Hitoshi TAKEMORI,** Junichi TAKI,*** Kenichi NAKAJIMA,***
Hisashi BUNKO,**** Saburo NAKAMURA,** Takayuki IKEDA** and Norihisa TONAMI***

*Department of Radiology, Tsuruga City Hospital

**Cardiovascular Center, Tsuruga City Hospital

***Department of Nuclear Medicine, Kanazawa University, Faculty of Medicine

****Department of Medical Informatics, Kanazawa University, Faculty of Medicine

A 72-year-old woman with hypertension showed no sign of myocardial accumulation of ^{123}I -BMIPP, and ^{201}Tl and ^{123}I -MIBG scintigraphy demonstrated normal findings. Electrocardiography showed left axis deviation with inverted T waves in leads I, aVL, V₂₋₆ and QT prolongation. Coronary arteriography, two dimensional echo cardiography and laboratory data showed no abnormality. Her 66-year-old sister with non-insulin-dependent diabetes mellitus also had no myocardial BMIPP uptake, but had normal ^{201}Tl finding. ECG and chest film findings were normal. Laboratory data indicated slightly high fasted blood glucose, triglyceride and total cholesterol. Four sons of a 72-year-old woman also underwent BMIPP scintigraphy. No BMIPP uptake was also observed in her 2nd son (49 years old) and his electrocardiogram showed QT prolongation. Since these rare findings indicating no myocardial BMIPP uptake were seen in a family, we suspected that a hereditary myocardial metabolic abnormality accounted for them.

Key words I-123 BMIPP, hereditary abnormality, myocardial fatty acid metabolism