Noninvasive identification of myocardial sympathetic and metabolic abnormalities in a patient with restrictive cardiomyopathy —In comparison with perfusion imaging—

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A 42-year-old man had the insidious onset of heart failure, and was diagnosed as having restrictive cardiomyopathy. Doppler echocardiography study showed short deceleration time of the E wave and short isovolumic relaxation time on transmitral Doppler flow. He underwent Tl-201, I-123 beta-methyl-iodophenyl pentadecanoic acid (BMIPP) and I-123-metaiodobenzylguanidine (MIBG) cardiac scintigraphy. Tl-201 studies showed normal uptake in the left ventricle indicating normal blood perfusion. I-123 BMIPP and I-123 MIBG showed reduced uptake in the inferior segment of the myocardium, indicating impairment of fatty acid metabolism and sympathetic abnormalities.

Key words: restrictive cardiomyopathy, MIBG, BMIPP