Summary

Impairment of Septal Uptake and Washout on $^{123}$I-BMIPP Myocardial SPECT after Pacemaker Implantation: Report of Two Cases


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Case 1 involved a 62-year-old woman with complete atrioventricular block and case 2 involved a 70-year-old woman with sick sinus syndrome. In both cases, echocardiography, $^{123}$I-15-(p-iodophenyl)-3-R,S-methyl pentadecanoic acid (BMIPP) and $^{99m}$Tc-tetrofosmin myocardial single photon emission computed tomographic (SPECT) findings were normal. Coronary arteriography and left ventriculography also revealed normal in both cases. After pacemaker implantation (DDD-type in case 1 and VVI-type in case 2), both patient’s electrocardiograms revealed left bundle branch block-type conduction disturbance, and echocardiography showed asynchronous hypokinesia in the septal region. One year later, although both patient’s ATP loading tetrofosmin SPECT were normal, BMIPP SPECT showed reduced uptake and increased washout in the septal region. These findings suggest that these changes of BMIPP SPECT might be caused by left bundle branch block-type conduction disturbance after pacemaker implantation.

Key words: $^{123}$I-BMIPP, Pacemaker, CLBBB.