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Myocardial clearance of I-123 metaiodobenzylguanidine in dilated cardiomyopathy

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We present the results of sequential imaging studies conducted in two patients with dilated cardiomyopathy whose responses to long-term beta-blocker therapy differed. We evaluated the time course of the myocardial clearance and the heart to upper mediastinal ratios of I-123 metaiodobenzylguanidine (MIBG) scintigraphy. In the first patient, the left ventricular ejection fraction as well as the clinical symptoms were improved by long-term beta-blocker therapy with a concurrent normalization of the myocardial clearance and the heart to upper mediastinal ratio of I-123 MIBG scintigraphy. The myocardial clearance and the upper mediastinal ratio of I-123 MIBG indicated no improvement in the second patient, and the left ventricular function did not change. The myocardial clearance and the heart to upper mediastinal ratio of I-123 MIBG scintigraphy were useful in evaluating the efficacy of long-term beta-blocker therapy in patients with dilated cardiomyopathy.

Key words: I-123 MIBG scintigraphy, dilated cardiomyopathy, beta-blocker