

## **Dilated cardiomyopathy relieved as a result of $\beta$ -blocker therapy: A case report—key points in assessment of prognosis based on MIBG myocardial scintigraphy and BNP levels**

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A 48-year-old male patient was admitted to our hospital with dyspnea accompanied by orthopnea. Chest x-rays showed a cardiothoracic ratio of 68% and pulmonary congestion. He was diagnosed with dilated cardiomyopathy.  $\beta$ -Blocker (carvedilol) therapy was initiated on Day 22 of the disease using a small initial dose. He was followed up based on BNP levels and MIBG scintigraphy. The H/M ratio and MIBG washout rate were 1.98 and 33.4%, respectively, on Day 20 and 2.15 and 28.1%, respectively, on Day 72. The patient was discharged on Day 72 when congestive heart failure improved. Relatively high BNP levels were observed for 1 month after starting treatment with a  $\beta$ -blocker. Plasma BNP levels were still as high when his heart failure was improved. BNP is useful as a convenient indicator for the severity of cardiac diseases. MIBG scintigraphy may be used thereafter to evaluate the severity in greater detail and more precisely determine the prognosis.

**Key words:** MIBG, BNP, prognosis, heart failure