

## Clinical value of lung uptake of iodine-123 metaiodobenzylguanidine (MIBG), a myocardial sympathetic nerve imaging agent, in patients with chronic heart failure

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This study investigated the clinical value of I-123 MIBG pulmonary accumulation and washout in patients with chronic heart failure (CHF). Nineteen patients with CHF and 15 normal volunteers (NL) were included. The uptake ratio of heart to mediastinum (H/M), that of lung fields to mediastinum (L/M), and washout rate (WR) of the heart and lung fields were calculated in anterior planar images and compared with results of echocardiography and cardiac catheterization. In the CHF group, the lung uptake in delayed images increased and lung WR was decreased, suggesting pulmonary endothelial lesions. Furthermore, there was a negative correlation between right and left lung WR and pulmonary arterial diastolic pressure (PA(D)) and pulmonary arterial systolic pressure (PA(S)) in the CHF group. Since the WR of MIBG reflected PA, it may be used as an index of severity of cardiac dysfunction.

**Key words:** iodine-123 MIBG, chronic heart failure, lung uptake