

Summary

Clinical Usefulness of ^{123}I -BMIPP Myocardial SPECT in Collagen Disease

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This study was designed to evaluate the clinical usefulness of ^{123}I -BMIPP myocardial SPECT for detecting cardiac involvement in patients with collagen disease. We studied 12 patients with systemic lupus erythematosus (SLE), 8 with progressive systemic sclerosis (PSS), 6 with polymyositis/dermatomyositis (PM/DM) and 3 with allergic granulomatosis and angiitis (AGA). A 111 MBq of ^{123}I -BMIPP was intravenously injected at rest, and SPECT images were obtained at 15 min after the injection. Seven of 12

SLE, 6 of 8 PSS, 3 of 6 PM/DM and all 3 AGA patients showed an abnormal tracer uptake. The left ventricular ejection fraction was inversely correlated with a BMIPP abnormality. The regional wall motion abnormality was reduced in regions with reduced tracer uptake. These findings suggest that ^{123}I -BMIPP imaging could be useful for assessment of cardiac involvement in patients with collagen disease.

Key words: ^{123}I -BMIPP, Collagen disease, Cardiac involvement, Myocardium, SPECT.