A 66-year-old-man was admitted to our hospital because of chest pain on effort in October 1999. The initial images of $^{123}$I-BMIPP myocardial SPECT (BM) showed moderately decreased tracer uptake in the apex and the delayed images revealed redistribution in the apex. Coronary angiography revealed 99% stenosis in the proximal portion of the left anterior descending artery. Since sudden onset anaphylactic shock induced by contrast media developed, so percutaneous transluminal coronary angioplasty was not performed. The patient’s symptoms were improved with medical treatment. On BM in March 2000, the initial images indicated slightly reduced uptake in the apico-anteroseptal region and the delayed images revealed mildly redistribution in the same area. BM in September 2000, the initial images showed moderately reduced uptake in the apico-anteroseptal region and the delayed images revealed high washout in the same area. The patient’s symptoms markedly deteriorated in March 2001, and BM initial images revealed slightly reduced uptake in the apico-anteroseptal region and the delayed images revealed redistribution in the same area again. During the clinical course, electrocardiography and $^{99m}$Tc-tetrofosmin myocardial SPECT revealed no marked changes. We consider that $^{123}$I-BMIPP myocardial SPECT is useful in estimating myocardial ischemia.

**Key words:** $^{123}$I-BMIPP myocardial SPECT, Ischemic heart disease, Myocardial fatty acid metabolism.