
The influence of the infarct extension on the ST depression in the leads opposite to the infarcting wall, i.e. 2,3 and 4, was studied by exercise-induced scintigraphy using [123I]MIBI and [99mTc]Tc-mdTPP in 20 patients with one-vascular old myocardial infarction (ONI) and in 18 patients with two-vascular old myocardial infarction (T2V). In ONI, exercise-induced ST depression was observed only in Leads 2, 3, and 4 in 6 patients with abnormal left ventricular ejection fraction (LVEF), whereas it was observed in Leads 2, 3, and 4 in 11 patients with normal LVEF. Exercise-induced ST depression was not observed in Leads 2, 3, and 4 in 3 patients with normal LVEF. In T2V, exercise-induced ST depression was observed in Leads 2, 3, and 4 in all patients with abnormal LVEF, whereas it was observed in Leads 2, 3, and 4 in 14 patients with normal LVEF. Exercise-induced ST depression was not observed in 3 patients with normal LVEF. These results suggest that exercise-induced ST depression in the leads opposite to the infarcting wall can be used to assess the extent of myocardial infarction, particularly in patients with one-vascular old myocardial infarction.