
To study on the regional myocardial perfusion during right ventricular endocardial high rate pacing (150 bpm), thallium-201 (Tl) myocardial scintigrams were performed during pacing and exercise as comparative study in 10 pts with normal coronary angiogram. Echocardiogram (UCG) was simultaneously recorded. Nine of these 10 pts had low uptake of Tl in the interventricular septum (IVS) during pacing, but none had low uptake of Tl during exercise. Tl uptake ratio (IVS/posterolateral (PL)) was decreased during pacing compared to that during exercise (0.77±0.05, 0.96±0.07, p<0.001). Washout rate(%) during pacing in the IVS decreased compared to that in the PL (28±12%, 48±12%, p<0.001). Percent systolic wall thickening (%WT: 100*(Ws-Wd)/Wd; Ws, Wd: systolic and diastolic wall thickness, respectively) of the IVS measured by UCG was markedly decreased during pacing compared to that at rest (34±6%, 13±7%, p<0.001), but it returned to the level at rest immediately after pacing off (36±9% at the 5th beat after pacing off, NS vs that at rest). These results suggest that regional myocardial blood flow decreased relatively but not absolutely in the region near the pacing site compared to the opposite site, which may not be ischemia.