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Reverse redistribution: Revisited with myocardial contrast echocardiography

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The aim of this study is to better understand the pattern and nature of reverse redistribution (RR) in myocardial perfusion imaging. In 20 consecutive acute myocardial infarction (MI) patients, frequency of RR was correlated with that of subendocardial MI that was detected by myocardial contrast echocardiography (MCE). RR was judged to be present when there was more than one grade of worsening in perfusion on 24 hr delayed images compared with the initial rest images. MCE evaluated no opacification in the subendocardial myocardium to suggest subendocardial MI.

Kendall's nonparametric correlation coefficiency was calculated. Concordant cases were 15 of 20 (75%) and correlation was statistically significant (p = 0.0285). Our results suggested that RR was correlated with MCE-detected nontransmural MI.

Key words: reverse redistribution, myocardial perfusion imaging, myocardial contrast echocardiography, subendocardial MI