CHANGE IN LEFT VENTRICULAR PERFORMANCE BY REDUCING AFTERLOAD: RADIONUCLIDE ANGIOCARDIOGRAPHIC MOVING EJECTION FRACTION IMAGE.


Moving EF image are useful in assessing the wall motion in old myocardial infarction. Nifedipine (10mg) was given for afterload reduction to assess the wall motion and change of BP, HR, EF, EDV, and ESV.

Subject: Fourteen cases of old myocardial infarction were studied group 1 (EF > 45%) composed 8 cases and group 2 (EF < 45%) of 6 cases. Tc99m pertechnetate First-Pass radionuclide angiography using multicrystal gamma camera system 77 was performed before and after administrating nifedipine.

Result: In group 1, BPs reduced significantly from 129 to 106 mmHg, EF increased from 58 to 66% and ESV decreased from 40 to 32 ml. But there were no significant change in HR and EDV. In group 2, there were no significant change in HR, BPs, EF and EDV. ESV decreased significantly from 103 to 88 ml. The red color (REF > 50%) zone of moving EF image, indicating good wall motion, increased after nifedipine in both groups. This improvement was more evident in group 1.

Conclusion: Nifedipine which reduces afterload, improves the wall motion in old myocardial infarction.