

Late Echocardiographic Follow Up of Ischemic Mitral Regurgitation in Patients with STEMI undergoing Primary Percutaneous Coronary Intervention

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Background: Late Echo data related to ischemic mitral regurgitation (IMR) dynamics in pts undergoing primary PCI has not been fully defined.

Aim: To determine by Echo the timing of appearance, natural history and predictors of IMR dynamics in a long term follow-up (F/U).

Material & Methods Echocardiography was performed in 100 consecutive pts with STEMI eligible for PPCI. The presence and severity of IMR including LVEF were evaluated on admission, 24 hour, 1, 6 and 36 months post procedure.

On admission 27/100 (27 %) pts showed IMR.

IMR dynamics during first 6 month of F/U are presented:

Results:

	MR dynamics			
	No Change (N=11)	Deterioration (N=9)	Decrease (N=9)	P value *
Age	58±6	61±15	59±10	ns
Male Gender (%)	9 (81)	8 (89)	5 (71)	ns
TIMI flow: end of PPCI 0-I	1	0	0	ns
II	1	3	0	ns
III	9	6	7	ns
LVEF before PPCI	45±6	40±3	43±6	0.03
LVEF 24h post PPCI	44±7	40±6	44±5	ns
F/U at 180 days	56±10	43±7	51±5	0.005
LVEF (%Δ) during F/U	25±24	8±15	20±17	0.09

* Deterioration Vs other groups

Echo data > 6 months were obtained in 60/100 of the study group.

After 6 months of F/U no significant changes in LVEF and MR severity were detected in 24/27 (89%) pts presented with IMR. However of 36 patients with no MR on admission only 4 (11%) with significantly reduced LVEF (34±/-8 versus 53±/-9 p<0.013) developed late IMR.

Conclusions: Low ejection fraction at presentation with no improvement during f/u was found to be a significant predictor for IMR deterioration in the early and late period.