Abstract: P3125

Five-year impact of immediate invasive strategy on clinical outcomes in patients with non-st segment elevation myocardial infarction: RIDDLE-NSTEMI Study

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BACKGROUND: Most of the previous studies evaluated the impact of early versus delayed invasive intervention on clinical outcomes in patients with non-ST segment elevation acute coronary syndrome (NSTE-ACS) in one-year period.

PURPOSE: The aim of this study was to assess whether the immediate invasive intervention influences the occurrence of death and new myocardial infarction (MI), specifically in patients with non-ST segment MI (NSTEMI) in long-term follow-up.

METHODS: In The Randomized Study of Immediate Versus Delayed Invasive Intervention in Patients With Non ST-segment Elevation Myocardial Infarction (RIDDLE-NSTEMI) 323 patients with NSTEMI were randomized to either immediate (median time to intervention was 1.4 hours) or delayed invasive strategy (61.0 hours). The incidence of primary outcome -death or new MI at 30 days was lower in patients assigned to the immediate (n=162) than in patients assigned to the delayed (n=161) invasive intervention group (4.3% vs. 13%, respectively; p=0.008). Long-term follow-up of 5 years was available for 96.90% of the patients.

RESULTS: At 5 years, the immediate invasive intervention was associated with lower rate of death or new MI, compared with delayed invasive strategy (15.8% vs 32.9%, respectively; p= 0.00). The observed benefit of the immediate intervention was mainly due to an increased early reinfarction risk with the delayed strategy (2.5% vs 9.9%, p=0.001) with similar new MI rates beyond 30 days ( 5.9% in the immediate and 10.7% in the delayed group, p=0.130). Five-year mortality was 12.0% in the immediate invasive intervention strategy group, and 18.1% in the delayed strategy group (p=0.135).

CONCLUSION: Immediate invasive intervention in the patients with NSTEMI significantly reduces the early risk of new MI. However, the timing of invasive intervention appears not to have significant impact on the clinical outcome beyond 30 days.