

Invasive versus Conservative Strategies in Patients with Non-ST-Elevation Acute Coronary Syndrome: An Updated Meta-Analysis

Purpose: We sought to perform an updated meta-analysis to determine whether early invasive therapy improves clinical outcomes in patients with NSTEMI-ACS. **Methods:** Randomized controlled trials (RCTs) identified from original articles and reviews. Major outcomes of death and myocardial infarction (MI) occurring from index hospitalization to the end of follow-up were extracted from published results of eligible studies. Secondary end points included the composite of death or MI; rehospitalization; recurrent angina; and repeat revascularization. **Results:** A total of Fifteen RCTs including 15,315 patients were included in this meta-analysis. No statistically significant differences in the risk of death (odds ratio [OR] 0.86, 95% confidence interval [CI] 0.76-1.06, $p=0.15$) or MI (OR 0.92, 95% CI 0.74-1.13, $p=0.41$) were detected between early invasive group versus delayed invasive or conservative approach group. Early invasive strategy significantly reduced the risk of composite of death or MI (OR 0.82, 95% CI 0.70-0.96, $p=0.02$), rehospitalization (OR 0.80, 95% CI 0.72-0.89, $p<0.001$), and recurrent angina (OR 0.75, 95% CI 0.56-0.99, $p=0.04$). Stratified analysis by the invasiveness suggested similar odds of mortality in studies comparing invasive versus conservative strategy (OR 0.87, 95% CI 0.68-1.11, $p=0.25$) and early versus late invasive approach (OR 0.81, 95% CI 0.50-1.32, $p=0.41$). **Conclusions:** Management of NSTEMI-ACS by early invasive strategy does not decrease the risk of death or MI at long-term follow up. However, early intervention reduces the risk of recurrent angina and rehospitalization compared with delayed intervention or conservative management.