

10017

Effects of statin therapy on clinical outcomes after acute myocardial infarction in patients with advanced renal dysfunction

[Purpose] We investigated the impact of statin therapy on major adverse cardiac events (MACEs) and all-cause mortality in patients with advanced renal dysfunction undergoing percutaneous coronary intervention (PCI) after AMI. [Methods] This study was based on the Korea Acute Myocardial Infarction Registry database. We included 861 patients with advanced renal dysfunction from among 33,205 patients who underwent PCI after AMI. Patients were divided into two groups: a statin group (n = 537) and a no-statin group (n = 324). We investigated the 12-month MACEs (cardiac death, myocardial infarction, repeated PCI or coronary artery bypass grafting) and all-cause mortality of each group. Subsequently, a propensity score-matched analysis was performed. [Results] In the total population studied, no significant differences were observed between the two groups with respect to the rate of recurrent MI, repeated PCI, coronary artery bypass grafting (CABG), or all-cause mortality. However, the cardiac death rate was significantly lower in the statin group ($p = 0.009$). Propensity score-matched analysis yielded 274 pairs demonstrating, results similar to those obtained from the total population. However, there was no significant difference in the cardiac death rate in the propensity score-matched population ($p = 0.103$). Cox-regression analysis revealed only left ventricular ejection fraction to be an independent predictor of 12-month MACEs (Hazard ratio [HR] of 0.979, 95% confidence interval [CI], 0.962-0.996, $p = 0.018$). [Conclusion] Statin therapy was not significantly associated with a reduction in the 12-month MACEs or all-cause mortality in patients with advanced renal dysfunction undergoing PCI after AMI.