Prehospital statin therapy and one-year mortality in patients with stable coronary artery disease undergoing percutaneous coronary intervention.

Statins have multiple effects in patients with coronary artery disease. No studies have investigated whether chronic statin pretreatment before percutaneous coronary intervention (PCI) has an impact on long-term mortality in patients with stable angina. The study included 8041 patients with stable angina. At the time of PCI, 5939 patients (73.8%) were receiving statins for >= 1 month before procedure and 2102 patients (26.2%) were not receiving statins. The primary outcome analysis was 1-year mortality. There were 192 deaths during the follow-up: 119 deaths among patients receiving statins and 73 deaths among patients not receiving statins (Kaplan-Meier estimates of 1-year mortality 2.06% and 3.59%; unadjusted hazards ratio [HR] = 0.56, 95% confidence interval [CI] 0.42-0.75; P<0.001). Landmark analysis showed that almost all mortality benefit occurred in the first 30-days after PCI: 10 deaths among patients receiving statins and 22 deaths among patients not receiving statins (Kaplan-Meier estimates of 30-day death, 0.17% and 1.06%, respectively; HR = 0.16, 95% CI 0.08-0.34, P<0.001). No significant difference in mortality according to statin pretreatment between 30 days and 1 year was observed (109 deaths among patients receiving statins vs 51 deaths among patients not receiving.
statins; Kaplan-Meier estimates 1.89% and 2.53%; HR=0.75, 95% CI 0.53-1.05, P=0.095). After adjustment in the Cox proportional hazards model, statin pretreatment was associated with a 35% reduction in the adjusted risk for 1-year mortality (adjusted HR=0.65, 95% CI 0.44-0.98, P=0.039). Pretreatment with statins before PCI was associated with a significant reduction of 1-year mortality in patients with stable angina.