MARIJUANA USE AND SHORT-TERM OUTCOMES IN PATIENTS HOSPITALIZED FOR ACUTE MYOCARDIAL INFARCTION

Background: Marijuana use is increasing worldwide. Concomitantly, there has been an increase in case studies reporting adverse cardiac events associated with marijuana use, yet little is known about the impact of marijuana use on cardiovascular outcomes. Therefore, in a retrospective analysis, we quantified outcomes of patients hospitalized for acute myocardial infarction (AMI) with reported marijuana use.

Methods: Hospital records for 8 states were screened for AMI. Clinical profiles and outcomes in patients with reported use of marijuana were compared to patients where marijuana use was not reported. Patients >70 years old and those who used cocaine, methamphetamine or alcohol were excluded. In total, 3,854 of 1,273,897 patients with AMI reported use of marijuana upon admission. The composite primary outcome included death, intraaortic balloon pump placement, mechanical ventilation, cardiac arrest, and shock.

Results: There was no association between marijuana use and the primary outcome in multivariate analysis accounting for age, race, payer, and known cardiac risk factors. However patients who used marijuana had a decreased adjusted odds of in-hospital mortality (OR 0.83, p=0.045) but an increased likelihood of mechanical ventilation (OR 1.19, p=0.004) post AMI.

Conclusions: We report several new observations regarding the effect of marijuana use on outcomes following AMI. Most surprisingly, it appears that marijuana use is associated with decreased mortality post AMI.