

MYOCARDIAL ISCHEMIA AND INFARCTION

LONG-TERM BETA-BLOCKER USE IS ASSOCIATED WITH INCREASED RISK OF MYOCARDIAL INFARCTION AMONG COCAINE USERS

ACC Poster Contributions
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Background: Beta-blocker (BB) use is associated with coronary artery spasm after cocaine administration. Due to concern of recidivism among cocaine users, AHA guidelines reserve chronic BB use in those with the strongest indications. However, there have been no studies evaluating the long-term use of BBs in cocaine users with hypertensive or coronary artery disease.

Methods: We conducted a retrospective cohort study at Montefiore hospital over a 10-year period among patients with known coronary or hypertensive heart disease who tested positive for cocaine use. Final cohort consisted of two groups: those who were prescribed BB (n=124) and those who never received a prescription for BB (n=363). Patients prescribed combined α - and β -blockers were excluded. Primary outcome measured was acute myocardial infarction (AMI); secondary outcome was mortality.

Results: See [Figure1]. Incidence of AMI following prescription of BB was significantly higher than without BB use (39.52% vs 18.18%; OR = 0.474; 95% CI: 0.328,0.686; p<0.001). However, BB use was associated with a lower mortality compared to individuals not given BBs (12.10% vs 24.16%; p = 0.009).

Conclusions: Prescription for long-term BB use increases the risk of AMI among those with a history of cocaine use and hypertensive or coronary artery disease. However, BB use is associated with a mortality benefit. Further prospective study is warranted.

Beta-blocker vs. No Beta-blocker

