



TOP TEN THINGS TO KNOW

Cocaine-Induced Chest Pain and Myocardial Infarction

1. In the last 6 months of 2004 there were ~ 126,000 cocaine-related Emergency Department in the United States.
2. 37% of cocaine-related Emergency Department visits involve individuals 35 to 44 years of age; younger patients or those with few cardiac risk factors with ACS should be questioned about cocaine use.
3. The most frequently reported symptoms are Chest pain, dyspnea, diaphoresis, palpitations, dizziness, and nausea.
4. Cocaine-associated myocardial infarction occurs after cocaine ingestion in 0.7% to 6% of individuals.
5. Patients with non-diagnostic ECG findings and normal cardiac markers should be managed in a chest pain observation unit for 9-12 hours; stress testing may be considered based on other risk factors and clinical status.
6. Cocaine-associated ACS should be treated like spontaneous ACS with the following exceptions (Class/level of evidence):
 - Benzodiazepines (I/B): neuropsychiatric effects can relieve chest pain and lead to beneficial hemodynamic effects.
 - β -blockers, including labetalol (III/C) should be avoided in the acute setting due to unopposed α -adrenergic effects, which may lead to worsening coronary vasoconstriction and increased blood pressure.
 - Calcium channel blockers (IIb/C) should not be used as first-line therapy but may be considered in patients not responsive to benzodiazepines or nitroglycerin.
 - Phentolamine (IIb/C): phentolamine decreases coronary vascular resistance and blood pressure after cocaine ingestion, and may be considered in patients not responsive to nitroglycerin or calcium channel blockers.
7. Patients with evidence of MI or atherosclerosis should receive long term antiplatelet therapy with aspirin.
8. Long-term β -blocker therapy should be considered in those with documented myocardial infarction, left ventricular systolic function, or ventricular arrhythmias who are at low risk for recurrent use of cocaine.
9. Cessation of cocaine should be the primary goal of secondary prevention.
10. Recurrent chest pain is less common and MI and death are rare in patients who discontinue cocaine.