COCAINE-RELATED ACUTE CORONARY SYNDROME AND INCIDENCE OF HEART DISEASE

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Purpose of Study Cocaine-related chest discomfort is frequently encountered in urban emergency departments. Incidence of co-morbid illness and heart disease is not well defined in patients with cocaine-related ACS. Appropriate risk stratification in patients with cocaine-related ACS is not clearly defined.

Methods Used 231 consecutive patients meeting inclusion criteria were entered into a large ACS registry at an urban, inner-city acute-care facility. Comparisons in demographics, co-morbid conditions, left ventricular function and coronary disease were made between patients with cocaine-related ACS and those with non-cocaine ACS.

Summary of Results 44 (19%) of these patients either tested positive for cocaine by urine drug screen or had self-reported cocaine abuse. Compared to the non-cocaine ACS patients, these individuals were significantly younger, more likely to be male, unmarried, uninsured and also have history of alcohol and tobacco abuse (all $p < 0.05$). The cocaine-users were less likely to have risk factors of diabetes ($p < 0.002$) and hyperlipidemia ($p < 0.02$). Ejection fraction mean was 51.3% (sd 15.4) in the cocaine-users vs. 48.1% (sd 14.0) in the non-cocaine users, with an incidence of EF $\leq 40\%$ of 28% vs. 31% respectively ($p = \text{ns}$). 50% (22/44) of the cocaine-users underwent a stress test evaluation, and 27% of these were positive for ischemia. Of the 41% (18/44) undergoing cardiac catheterization, 13/18 were diagnosed with significant CAD, 4/18 with non-ischemic cardiomyopathy, and one study was normal. A total of 24/44 (55%) had either a new or old diagnosis of documented CAD or NICM, compared to 94% of the non-cocaine ACS patients.

Conclusions Cocaine-related chest pain leading to hospitalization is often associated with infarction or significant coronary artery disease. Although optimal evidence-based management is lacking in this population, ischemia evaluations and appropriate further risk stratification and modification may be warranted.