



Acute Coronary Syndromes

INCREASED INCIDENCE OF ACUTE CORONARY SYNDROME FOLLOWING HURRICANE KATRINA IN NEW ORLEANS: THE IMPACT CONTINUES

Oral Contributions

West, Room 3020

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Background: We have sought to compare the incidence of acute myocardial infarction (AMI) before and after Hurricane Katrina along with contributing factors.

Methods: This is a single-center, retrospective study conducted at Tulane Medical Center involving patients admitted for AMI in the two years before Katrina and in the six years afterward. Using pre-specified demographic and clinical data, we compared the pre-Katrina and post-Katrina groups.

Results: In the 6-year post-Katrina period, there were 1177 admissions for AMI out of a total census of 48258 patients (2.4%) compared to 150 admissions out of a census of 21,079 (0.7%) in the 2-year pre-Katrina group ($p<0.0001$). The post-Katrina group had a higher prevalence of known coronary artery disease (49.1% vs. 30.7%, $p<0.001$), prior coronary artery bypass grafts (15.3% vs. 9.3%, $p<0.05$), hyperlipidemia (54.5% vs. 45.0%, $p<0.01$), psychiatric comorbidities (12.3% vs. 6.7%, $p<0.005$), smoking (52.5% vs. 39.3%, $p<0.05$), and substance abuse (14.7% vs. 6.7%, $p<0.005$). While the post-Katrina group had more often been prescribed aspirin (46.6% vs. 31.3%, $p<0.005$), beta blockers (46% vs. 34%, $p<0.05$), ACE inhibitors or angiotensin receptor blockers (49.5% vs. 36.0%, $p<0.05$), and statins (48.0% vs. 28.0%, $p<0.005$), medication adherence was less (52.3% vs. 70.7%, $p<0.0001$). The post-Katrina group was also more likely to be unemployed (17.8% vs. 2.0%, $p<0.0001$), uninsured (11.9% vs. 6.0%, $p<0.0001$) and reside in New Orleans (87.8% vs. 70%, $p<0.0001$). There were no significant differences between the two groups in terms of age, sex, ethnicity and hypertension.

Conclusion: Hurricane Katrina placed a tremendous impact on the physical, emotional and psychological wellbeing of the residents of New Orleans. The three fold increase in the incidence of AMI in the community continues despite increased adherence to standard of care and guidelines. These findings highlight the importance of devising strategies to improve the long term cardiovascular health of a community after a natural disaster, particularly in view of the recent spate of global natural disasters.