



Heart Failure and Cardiomyopathies

IMPACT OF OBESITY ON THE OUTCOMES OF STRESS CARDIOMYOPATHY: AN ANALYSIS OF NATIONAL INPATIENT SAMPLE

Poster Contributions
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Background: It has been shown that in patients with acute coronary syndromes (ACS), those who are overweight or mildly obese have better outcomes compared to those with normal body mass index. This is referred to as the “obesity paradox”. However, the impact of obesity on the in hospital outcomes of patients with stress cardiomyopathy has not been previously studied.

Methods: We searched the National Inpatient Sample (NIS) database from 2005 through 2012 using ICD 9 code 429.83 to identify patients with the primary diagnosis of Stress Cardiomyopathy. Obesity was determined based on the Elixhauser criteria provided by the AHRQ. Outcomes, costs and trends were compared between those with and without obesity. Cost data was evaluated using Poisson regression. Mortality, cardiogenic shock, respiratory failure, IABP, and circulatory assistance were evaluated using logistic regression models. Analyses for all outcomes accounted for NIS sampling design. SAS v. 9.4 was used for statistical analysis and $p < .05$ considered statistically significant.

Results: There were 94,418 patients admitted with a stress cardiomyopathy diagnosis between 2005 and 2012 and 7,509 (8%) were obese. Obese patients with stress cardiomyopathy had 46% lower odds of dying compared to non-obese patients with stress cardiomyopathy (95% CI = 24% to 61%; $p < .001$); no difference was observed for mortality trend across years. Statistically significant increasing linear trends were observed for both hospital cost and patient charges (4.1% per year and 8.3% per year, respectively; both $p < .001$). These increases did not differ between obese and not obese patients. Obesity was not associated with higher rates of cardiogenic shock, respiratory failure, or use of any circulatory assistance.

Conclusions: In this large sample of stress cardiomyopathy patients, we observed significantly lower in-hospital mortality among obese patients, suggesting that “obesity paradox” applies to patients admitted to hospital with Stress Cardiomyopathy akin to those with ACS.