**DECLINE IN THE IN-HOSPITAL MORTALITY OF TYPE 2 DIABETES PATIENTS WITH ACUTE ST SEGMENT ELEVATION MYOCARDIAL INFARCTION**

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Background: Gradual decline in the in-hospital mortality of patients with ST elevation myocardial infarction has been reported. The goal of this study was to evaluate this effect in type 2 diabetes mellitus (DM) patients presenting with ST elevation myocardial infarction (STEMI).

Method: The Nationwide Inpatient Sample (NIS) database was utilized to calculate the age-adjusted mortality rate of patients with type 2 diabetes presenting with STEMI from 1988 to 2006 using ICD-9 coding.

Results: A total population of 308,297 patients of over the age of 40 with type 2 diabetes presenting with STEMI were available between 1988-2006 for our analysis. We found that age adjusted mortally rate steadily declined to a lowest level in 2006. Age adjusted mortality from type 2 DM patients presenting with STEMI 469 per 100,000 in 1988 vs. lowest rate of 283 per 100,000 in 2006 (p<0.01). Mortality in non- DM patients also showed gradual decline starting in 1995.

Conclusion: Mortality rate from STEMI in patients with type 2 DM showed gradual decline from 1988 until end of study in 2006 suggesting persistent advancement in the care of DM patients has led to improved outcome.