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 **Acute Coronary Syndromes****SYSTEMIC SCLEROSIS IN ACUTE MYOCARDIAL INFARCTION: RISK FACTOR PROFILE AND PROGNOSTIC IMPLICATIONS**

Poster Contributions

Hall C

Saturday, March 29, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Acute Coronary Syndromes: Comorbid Considerations

Abstract Category: 1. Acute Coronary Syndromes: Clinical

Presentation Number: 1152-244

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**Background:** Systemic sclerosis is an autoimmune disorder affecting multiple organ systems. Vascular involvement is common and earlier studies have demonstrated a strong association between systemic sclerosis and the incidence of acute myocardial infarction (AMI). However, it is not clear if systemic sclerosis has any prognostic implications in patients with coronary artery disease (CAD). We sought to examine the impact of systemic sclerosis (SS) on in-hospital mortality in patients presenting with AMI.

**Methods:** The Nationwide Inpatient Sample, part of the Healthcare Cost and Utilization Project, is the largest publicly available inpatient database designed to provide information on characteristics and outcomes of patients discharged from United States community hospitals (non-Federal, short-term, general and specialty). Using the Nationwide Inpatient Sample, we identified 374061 adult patients with a discharge diagnosis of AMI, both ST-elevation (STEMI) and non-ST-elevation myocardial infarction (NSTEMI) in the calendar years 2008 to 2010 and they constitute our study population. Among those, 304 patients had a diagnosis of SS

**Results:** SS patients were predominantly females with a statistically significant lower prevalence of traditional CAD risk factors as compared to non-SS group; namely hypertension (45% vs 52%; p-value 0.01), diabetes (17% vs 34%; p-value 0.000), obesity (5% vs 11%; p-value 0.002) and smoking (16% vs 23%; p-value 0.002). Presentation was more likely to be a NSTEMI compared to non-SS patients but there was no significant difference in rates of revascularization procedures (namely left heart catheterization and percutaneous coronary intervention, coronary artery bypass grafting). The in-hospital mortality rate was higher for patients with SS (8.6% vs. 5.6%; p-value= 0.028). SS remained an independent predictor of higher mortality after adjusting for pertinent clinical variables using logistic regression analysis (p value =0.004, OR 1.88 [1.21-2.91]).

**Conclusions:** Despite a lower prevalence of traditional coronary artery disease risk factors in systemic sclerosis patients, they had higher in-hospital mortality from acute myocardial infarction.