**CORONARY STENT DIAMETER VARIABILITY AMONG ETHNIC GROUPS UNDERGOING REVASCULARIZATION FOR STEMI**

H. Heretis, **E. Shlofmitz**, M. Balek, C. Park, A.J. Buda

New York Hospital of Queens, Weill-Cornell Medical College, New York, NY, USA

Background: Studies have suggested smaller sized coronary vessels in the South Asian population compared to other ethnic groups, possibly contributing to their higher incidence of coronary artery disease (CAD). There is no data comparing coronary vessel size among different ethnic groups in patients presenting with ST-elevation myocardial infarction (STEMI). Given our highly diverse ethnic population, we sought to examine ethnic variations in stent diameter used for revascularization in STEMI patients presenting to our institution.

Methods: This is a retrospective cohort analysis assessing stent diameter used for revascularization in patients presenting to New York Hospital Queens with STEMI from June 2008 to December 2010. Patients were divided into five ethnic groups. Angiographic features recorded include culprit vessel, type of stent, stent location, number of stents used, stent diameter, and stent length.

Results: A total of 244 patients presented with STEMI and underwent PCI, of which 54% were Caucasian, 13% Hispanic, 4% African American, 18% East Asian, and 11% South Asian. Across the 5 ethnic groups, there were no significant variations in the culprit vessel involved. Notably, South Asians had a significantly smaller diameter stent placed compared to the other ethnic groups (2.84 ± 0.82 mm vs 3.22 ± 0.52 mm, p=0.03).

Conclusions: Stent diameter used for revascularization during STEMI was smaller in South Asians compared to the other ethnic groups. This finding supports the observation made in the literature that South Asians have smaller coronary arteries, which may contribute to a greater incidence of CAD in this ethnic group.