TRENDS IN THE PREVALENCE AND OUTCOMES OF NSTEMI AND STEMI AMONG PATIENTS WITH ACUTE MYOCARDIAL INFARCTION IN CHINA FROM 2001 TO 2011: CHINA PEACE RETROSPECTIVE AMI STUDY

Poster Contributions
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Authors: Sudhakar Venkata Nuti, Nihar Desai, Sisi Wang, Jing Li, Yongfei Wang, John Spertus, Frederick Masoudi, Harlan Krumholz, Lixin Jiang, China PEACE Collaborative Group, Yale Center for Outcomes Research and Evaluation, New Haven, CT, USA, China Oxford Centre for International Health Research, Fuwai Hospital, Beijing, People’s Republic of China

Background: Previous studies based on non-representative samples of patients have reported that NSTEMIs are less common in China than in Western countries (US rate is ~60%; China has been reported to be < 20%). Accordingly, we sought to determine the temporal change in the prevalence of NSTEMI in a nationally representative sample of Chinese patients hospitalized with AMI.

Methods: We collected a nationally representative sample of patients with AMI during 2001, 2006, and 2011 using a two-stage random sampling design within economic-geographic regions. Data were collected via standardized chart review by at least 2 independent abstractors. Patients’ characteristics and outcomes were compared between STEMI and NSTEMI using a chi-square test for categorical variables and a t-test for continuous variables.

Results: Our study sample consisted of 14,349 AMI admissions from 162 hospitals. Overall, 13.9% of patients had NSTEMI and 86.0% had STEMI. The percentage of NSTEMIs increased from 7.2% in 2001 to 10.1% in 2006 to 17.7% in 2011. Compared with patients with STEMI, those with NSTEMI were older; were more likely to have a past medical history of coronary heart disease, myocardial infarction, PCI, CABG, and heart failure; and were more likely to have comorbidities, including hypertension, diabetes, dyslipidemia, stroke, and chronic lung disease (p<0.01 for all). In addition, compared with patients with STEMI, those with NSTEMI were less likely to undergo cardiac catheterization (23.5% vs. 25.7%, p=0.04) and PCI (17.4% vs. 22.0%, p=0.01). However, there were no significant differences in the rate of in-hospital death (8.3% vs. 8.2%), stroke (0.7% vs. 0.6%), or major bleeding (6.4% vs. 6.8%) between patients with NSTEMI and STEMI, respectively.

Conclusions: Over the past decade in China, NSTEMIs in the AMI population were less frequent than in the US but increased over time. Further research is needed to determine whether there is a difference in the epidemiology of AMI in China or NSTEMI patients are systematically missed through less diagnostic testing.