



ACC.14

TCT@ACC-12 | innovation in intervention

A21

JACC April 1, 2014

Volume 63, Issue 12

Acute Coronary Syndromes

TRENDS IN CHARACTERISTICS, TREATMENT AND OUTCOMES AMONG PATIENTS WITH ACUTE MYOCARDIAL INFARCTION IN CHINA FROM 2001 TO 2011

Oral Contributions

Room 150 B

Saturday, March 29, 2014, 9:30 a.m.-9:45 a.m.

Session Title: Novel Strategies for Diagnosis and Risk Assessment in ACS

Abstract Category: 1. Acute Coronary Syndromes: Clinical

Presentation Number: 900-09

Authors: *Jing Li, Qing Wang, Shuang Hu, Frederick Masoudi, John Spertus, Harlan Krumholz, Lixin Jiang, the China PEACE Collaborative Group, State Key Laboratory of Cardiovascular Disease, Fuwai Hospital, Beijing, People's Republic of China, Center for Outcomes Research and Evaluation, Yale-New Haven Hospital, New Haven, CT, USA*

Background: Acute myocardial infarction (AMI) is responsible for a substantial and growing burden of death and disability in China. However, there is little information on trends of patient characteristics, treatment, and patient outcomes.

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. Multivariable models were constructed to calculate adjusted in-hospital mortality.

Results: We identified 16,100 AMI admissions from 162 hospitals. The median age was 65 years in 2001, 67 years in 2006, and 66 years in 2011. Patients were more likely to be current smokers and have hypertension, diabetes, or dyslipidemia over time. By 2011, 24% had at least three risk factors. The trends of treatment, length of stay, and in-hospital mortality are shown in Table. After adjusting for patient characteristics, the risk of mortality significantly decreased over time.

Conclusions: Over the past decade in China, patients with AMI had more comorbidity, more treatment with primary percutaneous coronary intervention but no greater overall reperfusion treatment for ST-segment elevation myocardial infarction, shorter length of stay, and lower in-hospital mortality. Despite favorable changes in care substantial opportunities to improve AMI care remain.

Table:

	2001 n=2299	2006 n=4468	2011 n=9333	p value
Age, y,	65(56,72)	67(56,74)	66(56,75)	<0.01
Female sex, %	30	30	32	<0.05
Reperfusion Therapies, %				
No reperfusion	45	47	45	0.08
Primary PCI	10	17	28	<0.01
Fibrinolytic therapy	45	36	27	<0.01
Acute medications, %				
Aspirin ≤ 24 h	78	87	90	<0.01
Clopidogrel ≤ 24 h	1	47	81	<0.01
β-blockers ≤ 24 h	48	61	55	<0.05
Statins during hospitalization	30	75	92	<0.01
Angiotensin converting enzyme inhibitors/ angiotensin receptor blocker	61	70	66	<0.01
Traditional Chinese Medicine ≤ 24 h	45	49	56	<0.01
Length of stay, d	12(7,18)	10(6,15)	10(6,14)	<0.01
Mortality, crude, %	8.4	9.6	6.6	<0.01
Adjusted mortality†, OR (95% CI)	ref	0.96(0.73,1.27)	0.77(0.58,1.03)	