[gw22-e0599]

STUDY ON THE TIME DISTRIBUTION OF ADMISSION FOR ACUTE MYOCARDIAL INFARCTION IN BEIJING FROM 2007 TO 2009

Wang Miao¹, Liu Jing¹, Xie Xueqin², Wei Zaihua³, Wang Wei¹, Sun Jiayi¹, Liu Jun, Qi Yue¹, Guo Moning², Zheng Jianpeng², Zhang Xiuying¹, Zhao Dong¹ ¹*Department of Epidemiology, Capital Medical University, Anzhen Hospital, Beijing Institute of Heart, Lung and Blood Vessel Diseases, Beijing, China;* ²*Beijing Public Health Information Center, Beijing, China;* ³*Beijing Centers for Diseases Control and Prevention, Beijing, China*

10.1136/heartjnl-2011-300867.289

Objective To explore the monthly, 24 solar terms and weekly distribution of admission for acute myocardial infarction (AMI) and whether the case-death of AMI is a different between weekday and weekend in Beijing.

Methods The data of this study came from the "Beijing Acute Myocardial Infarction Surveillance Platform" including 34 589 equal or greater than 25-year-old AMI inpatients whose households were registered in Beijing and hospitalised between 2007 and 2009. The International Classification of Diseases (Tenth Revision) codes used for identifying patients with AMI were I21 and I22. The date of admissions were divided into months and weeks according to the Gregorian calendar, and split into the 24 solar terms based on the traditional Chinese calendar.

Results There were 988 (32 AMI per day) AMI patients hospitalised in Beijing each month between 2007 and 2009. The number of hospitalised AMI had a cyclical variation according to the change of months, 24 solar terms and week. The monthly distribution identified the highest number of admissions in November (40 per day) and the lowest in July (29 per day). The number of admissions was highest from the cold dew to the beginning of beginning of spring and lowest from the end of heat to the beginning of white dew (40 vs 25 per day) among the 24 solar terms. The peak number of admissions occurred on monday and the lowest number on saturday (38 vs 26 per day). The overall case fatalities of AMI inpatients were not significantly different between patients hospitalised during the weekend and during the weekday (10.4% vs 9.9%, $p=0.159$).

Conclusion The admission time of AMI patients has a cyclical variation according to the month, solar terms and week. The number of AMI admissions would increase significantly

after holiday. The patterns of time distribution of admission should be considered in healthcare resource allocation.