

Objectives With aging, the body conditions and ways of social life change; however, it remains uncertain whether the onset timing of Acute myocardial infarction (AMI) in elderly people is affected.

Methods 2356 consecutive patients with Acute ST-segment elevation myocardial infarction (STEMI) were selected in China (elderly group ≥ 65 years, $n=1061$; middle-youth group <65 years, $n=1295$) during the period of May 2000 to May 2010, and their circadian variation, weekly distribution, monthly and seasonal variation were examined.

Results The frequency of STEMI occurrence in the elderly group was significantly higher than in the middle-youth group in March ($p=0.025$), which was significantly lower in July ($p=0.044$). Besides, the frequency of STEMI onset was significantly higher in the elderly group than in the middle-youth group on Monday ($p=0.032$), which was markedly lower on Saturday ($p=0.023$). Further, there was an increased frequency of STEMI occurrence at 6 h ($p=0.002$) and a reduced frequency at 20 h ($p=0.023$) in the elderly group. From 5:00 to 8:59, the frequency of STEMI onset was significantly higher in the elderly group ($p=0.003$), whereas from 17:00 to 20:59, it was significantly lower ($p=0.043$).

Conclusions The significant differences were found on the STEMI onset timing among middle-youth people and elderly people. In elderly people, the time of STEMI onset most often occurred with seasonal changes and rotations, working days alternate with resting days, and a more easier morning peak but not an evening peak.

GW23-e0875

THE DIFFERENCE IN REGULARITY OF ONSET TIMING OF ACUTE ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION AMONG ELDERLY AND MIDDLE-YOUTH PEOPLE, STUDY IN CHINA

doi:10.1136/heartjnl-2012-302920d.16

Jiangdaming Sunyujiao, Gaoyuan Zhangbo, Liyuze Zhangzhong, A Qiguoxian. *The First Affiliated Hospital of China Medical University*