[gw22-e0342]

RELATIONSHIP BETWEEN MORNING BLOOD PRESSURE SURGE AND CARDIOVASCULAR RISK FACTOR IN PRIMARY HYPERTENSIVE PATIENTS

Hu Xiao-Liang, Lu Fang-Hong, Liu Zhen-Dong, Zhao Ying-Xin, Sun Shang-Wen, Wang Shu-Jian *Shandong Academy of Medical Sciences, Jinan, Shandong, China*

10.1136/heartjnl-2011-300867.577

Objective To investigate the relationship between morning blood pressure surge and cardiovascular risk factors in primary hypertensive patients.

Methods According to the results of 24 h ambulatory blood pressure monitoring, 322 patients were classified as the morning BP surge group (MBPS group, n=149) and non-surge group (NMBPS group, n=173). Blood lipid and fasting blood glucose were recorded.

Results Age, FBG, 24 h SBP, nSBP, dSBP, 24 h PP, dPP, nPP, 24 h MAP, dMAP, nMAP were higher in MBPS group than those in NMBPS group ($p<0.01$ or $p<0.05$). Pearson relation analysis showed that morning blood pressure level positively correlated with age ($r=0.446$, $p<0.001$), 24 h SBP ($r=0.347$, $p<0.001$), FBG ($r=0.388$, $p<0.001$), nSBP ($r=0.166$, $p=0.043$), dSBP ($r=0.190$, $p=0.02$), LDL C ($r=0.244$, $p<0.01$), TC ($r=0.188$, $p=0.022$); after adjusting other risk factors, multiple regression analysis showed age, 24 h SBP and FBG remained as predisposing risk factors for MBPS level.

Conclusion Age, 24 h SBP and FBG are the important influencing factors of morning blood pressure surge.