Abstract  We estimated the influence of sleep habit and nocturnal lifestyle on circadian rhythm of blood pressure by use of ambulatory blood pressure monitoring (ABPM) and self-estimating questionnaire formats. A total of 30 workers aged 21 to 58 years old voluntarily participated. None had any chronic diseases or regular medication. The average subject daily worked for 8 hours, waked-up at 6:00, went-to-bed at 23:45, and had 6.25-hour sleep (median). The subjects were divided into 3 groups according to % dipping of sleep blood pressure; 10 to 20% dipping as a dipper, < 10% as a non-dipper, and ≧ 20% as an extreme-dipper. This characterization resulted in 15 dippers (50%), 8 non-dippers (27%) and 7 extreme-dippers (23%). Of the parameters estimated, (1) sleeping hours of non-dippers were significantly shorter than those of dippers ($p = 0.02$), (2) nighttime blood pressure of extreme-dippers were significantly lower than dippers ($p = 0.04$), (3) lowest blood pressure in nighttime of non-dippers were significantly higher when compared with the remaining 2 groups, (4) morning surges of blood pressure of non-dippers were the significantly smallest, whereas those of extreme-dippers were the greatest, and (5) refreshing scores of OSA sleep inventory MA version of non-dippers were significantly poorer when compared to extreme-dippers.

This study could indicate the significant influence of nocturnal lifestyle with short sleep on circadian rhythm of blood pressure, and the extended prospective-study might be promising for a precise conclusion.

【Key Words】ambulatory blood pressure monitoring, ABPM（24時間自由行動下血圧測定）、circadian rhythm of blood pressure（血圧日内変動）、non-dipper（非降下型）、nocturnal lifestyle（夜型生活スタイル）、sleep habit（睡眠習慣）