

Prevalence and factors related with inter-arm blood pressure difference in hypertensive elderly in Yasothon province, Thailand

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Increase of systolic blood pressure difference between arms was associated with increased risk of atherosclerosis and also identified as a predictor of cardiovascular event and mortality. The aim of this study was to investigate the prevalence of an inter-arm systolic blood pressure difference (sIAD) in hypertensive elderly and to identify what factors include participant's characteristic and physical performance between individual who have normal and abnormal sIAD, who living at Yasothon province, Thailand. This study was conducted cross sectional study from review medical data and selected 196 hypertensive elderly without cardiovascular disease and who met inclusion criteria (average age 71.74 ± 6.58 years, 54.08% women, 68.37% never smoked). Blood pressure was recorded randomly sequential technique for each arm using an automated oscillometric device. The sIAD was expressed as the absolute systolic blood pressure, and difference were determined for individual subject, was calculated by subtracting the right arm systolic blood pressure (R) from the left arm (L) ($|R-L|$). Participants were evaluated vascular status by sIAD and physical performance was assessment by hand grip strength. The prevalence of an abnormal sIAD will report as a percentage and compared the between group was used Student t-test, differences were considered to be statistically significant where $p < 0.05$. The prevalence of abnormal sIAD (defined as $sIAD \geq 10$ mmHg) was 17 (8.67%) participants. Number of participant who reported smoke habit (ex-smoker and current smoker) together with resting systolic blood pressure were significantly higher in participants who had abnormal sIAD group ($p < 0.05$). The results instruct there is considerable that abnormal sIAD in the hypertensive elderly, which was risk factor for cardiovascular disease. Thus, in primary care may applied blood pressure measurement as a simple tool for assessment of cardiovascular status in Thai community population.

Biography

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