



AC024

Adult Cardiology & Clinical Cardiovascular Medicine • Poster Presentation

24-HOUR AMBULATORY BP PROFILE COMPARED WITH THE LV GEOMETRY AND FUNCTIONS IN HYPERTENSIVE HEART FAILURE PATIENTS.

A. SOAGA¹, FA DANIEL², AP. ADEBOLA³

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Background Ambulatory blood pressure monitoring has been established as a means of confirming the diagnosis of hypertension and monitoring of blood pressure control. Heart failure is a common cause of medical admission with a 5-year mortality rate of up to 50%. Hypertensive heart disease is a major contributor to heart failure in Sub-Saharan Africa. AMBP monitoring has not been widely studied in hypertensive heart failure. Its relationship with left ventricular (LV) geometry and functions should be evaluated.

Objectives: It was a study that assessed the relationship between 24-hour ambulatory blood pressure (AMBP) profile, LV geometry and functions in hypertensive heart failure patients.

Methodology: This was a cross-sectional study on 114 subjects. A total of 38 patients with hypertensive heart failure was recruited consecutively and compared to 38 hypertensive subjects without heart failure and 38 normotensive individuals.

Results: The mean age of participants was 62.34 ± 12.7 . Concentric LV hypertrophy and Heart Failure with preserved Ejection Failure were the most common in the hypertensive heart failure group. Left ventricular mass and left ventricular mass index (LVM and LVMI) negatively correlated with asleep systolic dip ($r = -0.304$, $p = 0.043$ and $r = 0.298$, $p = 0.049$), respectively. Non-dipping pattern was the most common pattern of AMBP among hypertensive heart failure, hypertensive and normotensive individuals, respectively. There was no significant relationship between the AMBP parameters and left ventricular functions.

Conclusion: Non-dipping pattern of ambulatory BP profile and concentric LV geometry were the most prevalent among the hypertensive heart failure patients. No significant relationship between 24-hour AMBP and left ventricular functions.

Keywords: 24-HOUR AMBULATORY BP MONITORING, LV GEOMETRY AND FUNCTIONS, HYPERTENSIVE HEART FAILURE