Editorial

iMedPub Journals
www.imedpub.com

Journal of Cardiovascular Medicine and Therapy

2021
Vol.4 No.1:e001

Left Atheroma Mass and Occurrence Out-of-Office Hypertension in an Extensive Population

Raimondo Thomas*

Department of Cardiology, Alfaisal University, Riyadh, Saudi Arabia

***Corresponding author:** Thomas R, Department of Cardiology, Alfaisal University, Riyadh, Saudi Arabia, E-mail: thomndo@hotmail.com

Received date: February 01, 2021; **Accepted date:** February 15, 2021; **Published date:** February 22, 2021

Citation: Thomas R (2021) Left Atheroma Mass and Occurrence out of Office Hypertension in an Extensive Population. J Cardiovasc Med Ther Vol.4 No.1: e001

Abstract

Hypertension is an important risk factor for the development of cardiovascular disease, and is a major cause of morbidity and mortality worldwide. Traditionally, hypertension diagnosis and treatment and clinical evaluations of antihypertensive efficacy have been based on office blood pressure (BP) measurements; however, there is increasing evidence that office measures may provide inadequate or misleading estimates of a patient's true BP status and level of cardiovascular risk. The introduction, and endorsement by treatment guidelines, of 24-hour ambulatory BP monitoring and self (or home) BP monitoring has facilitated more reliable and reproducible estimations of true BP, including the identification of white-coat and masked hypertension, and evaluation of BP variability.

Keywords: Left atheroma; Hypertension; Cardiovascular disease

Editorial Note

High blood pressure (BP) is one of the most crucial risk factors for morbidity and mortality. Many reports have recognized high BP as the best example of a surrogate measure for cardiovascular disease, mainly for stroke. A recent report from the Global Burden of Disease Study ranked high BP as the most crucial risk factor among 67 risk factors studied for worldwide mortality [9.4 million deaths, 95%confidence interval (CI) 8.6–10.1 million] and disability-adjusted life years (7%, 95%CI 6.2–7.7%) during 2010. Non pharmacologic treatments, mostly dietary sodium reduction, have been utilized for hypertension since the early 1900s. Several drugs and surgical therapies were established shortly after World War II, but they proved to be relatively ineffective and many of the drugs produced critical side effects. The modern era of effective drug therapy started with the establishment of thiazides in the early 1960s, which was followed by conduct of the first randomized controlled trial to document the capacity of diuretics to avert cardiovascular disease (CVD). Over the next 50 years, numerous randomized controlled trials documented the effectiveness of several classes of drugs in lowering BP and averting CVD, with few if any side effects. Likewise, various non-pharmacologic interventions including weight loss, dietary sodium reduction, potassium supplementation, physical activity, reduced alcohol consumption, and low-fat diets rich in fruits and vegetables have been effective in lowering BP and avert hypertension.

Discussion

The current array of drug and nondrug therapeutic options permit for control of hypertension to currently recommended goal BP levels in all but the rarest patient and supply the capacity to decrease BP to levels much lower than current guidelines recommend. Despite this capability, the vast majority of patients with hypertension worldwide are untreated or badly treated. This article explores the disappearance of high BP control in the general population of the United States and worldwide and reviews the literature related to approaches that could dramatically improve hypertension control rates in different settings. It is focused on the treatment of established hypertension rather than on the prevention of hypertension and deals mainly with issues related to pharmacologic rather than non-pharmacologic therapy. Findings regarding the association of left atheroma mass (LAM) and new-onset hypertension are based on blood pressure measured in the office. We sought to evaluate the value of LAM in predicting in-office and out-of-office incident hypertension in members of the general population enrolled in the Pressioni Monitorate E Loro Associazioni study. The study included participants with usual office (n=792), home (n=714) and 24-h (n=825) ambulatory blood pressure (ABP) at baseline assessment who had a legible echocardiogram at entry and at the end of follow-up. Each normotensive group was divided into quartiles of LAM indexed (LAMI) to height. Over a follow-up of 148 months cumulative incidence of new office, home and 24-h ABP hypertension were 35.9, 30.7 and 36.1%, respectively. In fully modified models (including age, sex, BMI change during follow-up, baseline serum glucose, creatinine, total cholesterol office, home and 24-h SBP and DBP). Higher LVMI values (i.e. the highest vs. the lowest quartile) were independently associated with an increased risk of home [odds ratio (OR)=2.14, 95%confidence interval (CI) 1.21–3.77, P=0.008] and 24-h ABP hypertension (OR=1.70, 95%CI 1.05–2.76, P=0.03). This was not the case for new-onset office hypertension (OR=1.61, 95%CI 0.94–2.74, P=0.07). Over a follow-up of 148 months cumulative incidence of new office, home and 24-h ABP hypertension were 35.9, 30.7 and 36.1%, respectively.

Conclusion

In fully modified models (including age, sex, BMI change during follow-up, baseline serum glucose, creatinine, total cholesterol office, home and 24-h SBP and DBP). Higher LVMI values (i.e. the highest vs. the lowest quartile) were independently associated with an increased risk of home [odds ratio (OR)=2.14, 95%confidence interval (CI) 1.21–3.77, P=0.008] and 24-h ABP hypertension (OR=1.70, 95%CI 1.05–2.76, P=0.03). This was not the case for new-onset office hypertension (OR=1.61, 95%CI 0.94–2.74, P=0.07). Our study provides the first authentication that in hypertensive individuals the magnitude of LAMI is independently associated with the risk of incident out-of-office hypertension.