

PS1.058**Central hemodynamics and hypertension: assessment in a Portuguese public health center population - research protocol**

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Introduction: Hypertension is a chronic disease that leads to increased morbidity and mortality. Although brachial blood pressure (bBP) measurements remain strong predictors of structural cardiovascular damage, central blood pressure (cBP) parameters have been showing increasing interest due to their prognostic value for cardiovascular events and a different influence under some antihypertensive treatment regimes, compared with bBP.

Objectives: The aims of this study were to evaluate, on a representative sample of a Portuguese Public Health Center population, the bBP and cBP parameters, to determine the prevalence of hypertension and to identify factors that may influence the difference between bBP and cBP measurements.

Methods: This is an observational, cross-sectional study, in adult users of a Public Health Center in Minho, Portugal. Use shall be a representative sample of the population, to which the measurement of the brachial BP seconds standardized rules for benchmarked device will be held, and calculated the central PA and hemodynamic indices by tonometry analysis of flattening the radial artery and pulse wave. Later there will be a conference where the demographic data will be collected (age, sex, weight, height, BMI, alcohol consumption and smoking), medical history (Vascular Accident previous Cerebral, diabetes mellitus, atrial fibrillation, Left Ventricular Hypertrophy and peripheral arterial disease) and anti-hypertensive treatment. Statistical analysis of data a descriptive analysis and subsequent comparison of dependent variables using multiple logistic regression models will be performed.

Discussion/Conclusion: This work may suggest subgroups of patients where the central BP measurements can contribute to the therapeutic antihypertensive decision, the benefits may be related to effects 'beyond BP control,' and whose characteristics may have greater weight in future studies.

Keywords: Hypertension; Brachial blood pressure; Central blood pressure.