Predictors for White Coat Hypertension in Brazilian African Descendents

Kátia Floripes Bezerra
Ph.D, Student, Escola Bahiana de Medicina e Saúde Pública, Salvador, Brazil (Bahian School of Medicine and Public Health, Salvador, Brazil

Constança Margarida Sampaio Cruz
Adjunct Professor, Escola Bahiana de Medicina e Saúde Pública, Salvador, Brazil (Bahian School of Medicine and Public Health). Coordinator of Multidisciplinary Research of "Hospital Santo Antonio, Obras Sociais Irmã Dulce", Salvador, Brazil

Luiz Eduardo Fonteles Ritt
Professor, Permanent Postgraduate Body of Medicine and Human Health of the Escola Bahiana de Medicina e Saúde Pública (Bahian School of Medicine and Public Health). Coordinator of research and medical training at Hospital Cardiopumonar, Salvador, Brasil

Gilson Soares Feitosa Filho
Professor, Permanent Postgraduate Body of Medicine and Human Health at the Escola Bahiana de Medicina e Saúde Pública, Salvador, Brasil

Mário de Seixas Rocha
Professor, Permanent Postgraduate Body of Medicine and Human Health at the Escola Bahiana de Medicina e Saúde Pública, Salvador, Brasil

Carlos Antônio Guerreiro de Moura
Adjunct Professor at the Escola Bahiana de Medicina and Saúde Pública (Bahian School of Medicine and Public Health). Adjunct Professor at the Faculdade de Medicina, UNIFACS. Preceptor of the Residency in Internal Medicine at Obras Sociais Irmã Dulce do Hospital Santo Antônio, Salvador, Brazil

Carlos Geraldo Guerreiro de Moura
Adjunct Professor at the Escola Bahiana de Medicina e Saúde Pública (Bahian School of Medicine and Public Health). Coordinator of the Residency in Clinical Practice at the Hospital Santo Antônio - Obras Sociais Irma Dulce, Salvador, Brasil

Abstract:

Introduction: White coat hypertension (WCH) is a multifactorial clinical condition characterized by elevated office blood pressure (OBP) that is not maintained in the readings performed out of the doctor's office. The literature is controversial and there is a shortage of studies in Brazilian African Descendants. The objective of this study was to evaluate the occurrence of WCH and associated factors in primary care.

Methods: Cross-sectional observational study. We studied 178 patients with OBP ≥140 / 90mmHg, without previous diagnosis of hypertension. These patients performed home blood pressure monitoring (HBPM), were considered to have WCH those with mean BP below 135/85 mmHg while awake. We used SPSS version 20 for all statistical analyses.

Results: The prevalence of WCH was 46.63%; 95% CI: (39.38 - 53.98) among individuals with OBP ≥140 / 90mmHg. BMI, WHR, fasting blood glucose, triglycerides and wall thickness of the Left Ventricle did not present a significant difference when we compared WCH and hypertensive groups. We found a significant interaction between family history of hypertension and African ancestry in logistic regression. When dividing the sample according to ethnicity, the presence of a family history of hypertension in individuals of African ancestry greatly increased the chance of having WCH when compared to those with systemic arterial hypertension (SAH).

Conclusion: Unfavorable metabolic changes occurred similarly in patients with WCH and SAH. Analyzing WCH and hypertensive individuals of African ancestry, it was evident that having a family history of hypertension presents a very high probability of those individuals having WCH.

Keywords:

White coat hypertension, African ancestry, heredity.