Association of Elevated Fibrinogen and Prothrombotic Lipoproteins Levels in Individuals with Hypertension in Pernambuco, Brazil

Araújo, T. F. S.<sup>1</sup>; Santos, B. S. dos<sup>1,2</sup>; Pedrosa, L. V. B.<sup>1</sup>; Fonseca, C. S. M.<sup>1</sup>; Santos, A. T. B.<sup>1</sup>; Mota, C. R. F. C.<sup>1</sup>; Castro-Neto, A. L<sup>2</sup>.; Amorim-Filho, J. M. R.<sup>2</sup>; Pimenta Filho, A. A.<sup>1</sup>; Lima, V. L. M.<sup>1</sup>

Hypertension is a strong risk of cardiovascular disease and arterial thrombotic complications. Increased levels of prothrombotic markers such as fibrinogen and thromboatherogenic lipoproteins have been related to damage and cardiovascular outcomes in hypertensive population. However, there is a lack of observational studies and reports on the association between these markers for cardiovascular disease in hypertensive population in the State of Pernambuco, Brazil. The objective this study was to evaluate the fibringen and lipoproteins levels in hypertensive individuals of Pernambuco. 124 voluntary individuals participated of this research, and they were divided in two groups: a hypertensive group (63) and a normotensive group (61). Serum fibringgen. HDL-cholesterol (HDL-c). LDLcholesterol (LDL-c), VLDL-cholesterol (VLDL-c), Total cholesterol (CT) and Triglyceride (TG) were measured in all participants. The min fibrinogen values were higher in hypertensive group (416.3 vs 287.5, p<0.0001) as were LDL-c (138.4 vs 123.0, p=0.04), VLDL-c (29.1 vs 22.4, p=0.02), CT (212 vs 185, p=0.002), TG (169 vs 109, p=0.003), unless HDL-c (41.2 vs 42.1, p=0.66) values. Thus, significations elevations of seric levels of fibrinogen, LDL-cholesterol and VLDL-cholesterol, in association with hypertension, represent significant risk in etiology of others pathologies, for example, the atherosclerosis and arterial coronary disease.

Key words: Fibrinogen, Lipoproteins, Hypertension, Cardiovascular Disease

Suported by: CNPq/UFPE

<sup>&</sup>lt;sup>1</sup> Departamento de Bioquímica, Centro de Ciências Biológicas, Universidade Federal de Pernambuco, Pernambuco, Brasil.

<sup>&</sup>lt;sup>2</sup> Laboratório de Bioquímica Clínica, Faculdade do Agreste de Pernambuco, Pernambuco, Brasil.