

ASSOCIATION BETWEEN ARTERIAL STIFFNESS AND PROTEINURIA IN UNCONTROLLED HYPERTENSIVE PATIENTSB Marques, **L Nogueira**, A Cunha, M Cunha, S Mattos, J D'El-Rei, V Prangiel, W Oigman, M Neves
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Introduction: Studies have associated high rates of arterial stiffness with a decline in renal function, however with inconsistent results. Purpose: Evaluate the association between arterial stiffness and proteinuria in uncontrolled hypertensive patients. Methods: cross-sectional study, hypertensive patients, 45 and 65 years, clinical, nutritional and laboratory evaluation, 24-hour urine, blood pressure (BP) measurement, pulse wave velocity (PWV), central hemodynamic parameters. Results: patients (n=23) were divided into group PWV 2, $p=0.73$), body fat percentage (29 ± 2 vs $34\pm 3\%$, $p=0.26$), C-reactive protein (0.2 ± 0.0 vs 1.7 ± 1.0 mg/dl, $p=0.23$) and creatinine clearance (98 ± 12 vs 90 ± 5 ml/min, $p=0.54$). In 24-hour urine, there were significant differences in proteinuria (95 ± 13 vs 179 ± 28 mg, $p=0.03$) and sodium (152 ± 24 vs 242 ± 31 mEq, $p=0.03$) and no difference in potassium (49 ± 7 vs 49 ± 6 mEq, $p=0.98$) and magnesium (80 ± 9 vs 89 ± 10 mg, $p=0.55$). There was a significant difference between the groups in PWV (8.5 ± 0.1 vs 11.6 ± 1.0 m/s, $p=0.01$), which was not observed in the systolic blood pressure (SBP), diastolic blood pressure (DBP) ($141\pm 2/89\pm 2$ vs $148\pm 4/89\pm 2$ mmHg, $p=0.05$), aortic SBP (132 ± 3 vs 141 ± 5 mmHg, $p=0.27$) and aortic pulse pressure (45 ± 4 vs 51 ± 4 mmHg, $p=0.39$). There was positive correlation of PWV with SBP ($r=0.44$, $p=0.03$) and proteinuria ($r=0.55$, $p=0.01$). The group $PWV\geq 10$ presented positive correlation with total cholesterol ($r=0.53$, $p=0.04$) and body fat percentage ($r=0.56$, $p=0.03$). Conclusion: Arterial stiffness was associated with higher urinary excretion of sodium and proteinuria, suggesting higher salt intake and endothelial dysfunction in this population.

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