

[PP.22.182] PULSE WAVE VELOCITY AND BIOLOGIC CARDIOVASCULAR RISK FACTORS

M.A. Gomez-Marcos, J.I. Recio-Rodriguez, E. Rodriguez-Sanchez, M.C. Patino-Alonso, C. Agudo-Conde, C. Castaño-Sanchez, C. Rodriguez-Martin, P. Delgado-Benito, J. Prieto-Mateos, L. Garcia-Ortiz. Primary Care Research Unit La Alamedilla, Salamanca-Spain

Objectives: To analyze the relationship between Pulse Wave Velocity and biologic cardiovascular risk factors in patients with primary arterial hypertension.

Methods: A cross-sectional study was conducted in a primary care setting, with the inclusion of 373 hypertensive patients aged 30–80 years. Pulse Wave Velocity were measured with the SphygmoCor system. We performed multiple linear regression analysis by Stepwise method, using Pulse Wave Velocity (m/seg) as dependent variable and HbA1c (%), Cholesterol total and HDL (mg/dl), uric acid (mg/dl), albumin/creatinine index(mg/g), PCR high sensibility (mg/g), HOMA index and fibrinogen (mg/g) as independent variables, adjusted by sex and age.

Results: Mean aged 55.13 (SD: 11.85) years, men 227 (61%). We found positive correlation between Pulse Wave Velocity and age ($r = 0.564$), glucose ($r = 0.299$), uric acid ($r = 0.144$), HbA1c ($r = 0.285$), PCR high sensibility ($r = 0.155$), insulinemia ($r = 0.154$) and HOMA index ($r = 0.256$). We found in multiple linear regression the variables that remain in the equation also of age ($b = 0.102$, $p < 0.01$) and sex ($b = 0.251$, $p = 0.232$), the HOMA index ($b = 0.142$, $p < 0.01$), PCR high sensibility ($b = 0.771$, $p < 0.01$) and HbA1c ($b = 0.235$, $p < 0.05$).

Conclusion: Pulse Wave velocity is determined by age, HOMA index, HbA1c and PCR high sensibility without influence of fibrinogen and lipids.

Citation: Gomez-Marcos M.A., Recio-Rodriguez J.I., Rodriguez-Sanchez E., Patino-Alonso M.C., Agudo-Conde C., Castaño-Sanchez C., Rodriguez-Martin C., Delgado-Benito P., Prieto-Mateos J., Garcia-Ortiz L. PULSE WAVE VELOCITY AND BIOLOGIC CARDIOVASCULAR RISK FACTORS, *Journal of Hypertension*, Vol 29, e-Supplement A, June 2011, e347

Date: Sunday, June 19, 2011

Session Info: POSTER SESSION 22: LARGE ARTERIES

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