Uric acid, gammaglutamiltransferase and cardiovascular diseases in elder Cuban people. Freyre Andrade´s Teaching Hospital. 2015-2018

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Abstract

Objective: Cardiovascular diseases (CVD) constitute the main global cause of mortality. Elderly people represent 42 % of the affected population. However, to date the exact pathological processes involved in CVD remain unclear in spite of the Framingham Heart Study. Recent studies have identified uric acid (UA) as an independent cardiovascular risk factor through oxidative stress pathways- induced endothelial dysfunction. In this study, we analyzed the relationship between UA and CVD in the Cuban elderly population. **Material and Methods**: A clinical, analytic, case-control study was performed. Blood test looking for atherosclerosis or any other kind of vascular risk factors such as: UA, GGT, Cholesterol and triglycerides were quantified following Freyre Andrade's Teaching Hospital laboratory guidelines. Furthermore, Body Mass Index, waist circumference (WC), and blood pressure in each patient were measured. **Results**: Total amount of sample was n=137. The majority of subjects were female (55. 47 %), between 61 and 70-years-old (35.7 %), and in the healthy control group (57.66 %). Patients with CVD represented 42 % (n=58). Statistically, T test excluded similarity between UA media for sick and healthy population (p=0.05). UA was higher in male cases (p= 0.007). Moreover, an association between UA and WC was observed (p=0.007). Importantly, UA high concentrations were independent of creatine clearance figures as per Cockcroft equation (p=0.617), suggesting that UA elevations were not related to renal failure. **Conclusions**: UA concentration may constitute a useful marker in cardiovascular diseases prevention and follow-up.