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CAN PULSE PRESSURE STRATIFY FEMALE PATIENTS PRESENTING WITH ACUTE MYOCARDIAL INFARCTION?
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Low pulse pressure is a known risk factor for poor cardiovascular outcome among patients presenting with acute myocardial outcome. The relation between gender, pulse pressure, and cardiovascular outcome is unknown. GUSTO-V was a multicenter, double-blind, clinical trial of 16,588 patients presenting with acute ST-segment elevation myocardial infarction assigned randomly to full dose versus half-dose reteplase plus abciximab loading followed by a 12-hour infusion. The primary endpoint of this study was 30-day all-cause mortality. There were 950 deaths at 30 days. Female patients were at significantly decreased risk for 30-day mortality (adjusted OR, 0.28; 95% CI 0.09 to 0.89; P < 0.029). However, even after adjusting for treatment group, age, Killip Class, age, heart rate greater than 100 beats per minute, index anterior myocardial infarction, history of myocardial infarction, diabetes, and medications, female patients with a low pulse pressure less than 44 mmHg were at significantly increased risk for 30-day all-cause mortality (adjusted OR, 1.04; 95% CI, 1.02 to 1.07; P < 0.005). Although female patients presenting with acute myocardial infarction have a better short-term outcome than male patients, female patients with a low pulse pressure are at significantly increased risk for 30-day mortality.

Key Words: Pulse pressure, myocardial infarction, female

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PSYCHOSOMATIC CHARACTERISTICS IN HYPERTENSIVE PATIENTS
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Objective: From the suggestion of the role of psychological factor in essential hypertension, we aimed to study how different forms of hostility were connected with high scores in alexithymia and their correlates with compliance and outcome.

Methods: We studied 50 sequential patients in a specialized hypertension consultation of a central hospital setting (mean age=63.5 years; mean HT evolution=17.8 years: HT Grade: 40% Grad I and II, 60% grade III) by means of TAS20 (Taylor), HDS (Smath,82), STAXI (Spielberger, 94).

Conclusions: We detected high scores on anxiety, significantly higher in women than in the general population. Patients with higher degree of hypertension show higher anger-in score. Patients with bad outcomes in hypertension control, show a higher hostility experience and significant higher scores in alexithymia. Those less compliant to treatment showed an easier general propensity to express hostility and higher scores in alexithymia. Some conclusions on non+ pharmacological therapeutic strategies in hypertension patients are suggested.

Key Words: Hypertension, psychology, anxiety

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GENDER DIFFERENCES IN THE YEARLY VARIATION OF PLASMA FIBRINOGEN IN PATIENTS WITH MILD-TO-MODERATE ESSENTIAL HYPERTENSION
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Plasma fibrinogen, considered a significant marker for assessing the potential risk of myocardial infarction and stroke, shows a highly predictable seasonal variability, with highest values in the colder months of the year. On the other hand, the described gender differences in basal protein kinetics could contribute to the lower metabolic rate and fibrinolytic potential in women. Accordingly, the aim of this study was to quantify possible differences between hypertensive men and women in their seasonal variation of plasma fibrinogen. We studied 486 mild-to-moderate hypertensive men of 52.3±12.3 (mean±SD) years of age, and 528 hypertensive women of 53.5±14.3 years of age. In addition to the medical records and clinical evaluation, hypertension was corroborated by ambulatory blood pressure monitoring (ABPM) performed at 20-minute intervals during the day (07:00 to 23:00 hours) and every 30 minutes at night for 48 consecutive hours. A complete urine and blood test was performed on the same day before starting ABPM. The circannual variation of plasma fibrinogen, established by multiple-component analysis, was compared between genders by nonparametric testing. For the whole group of patients as well as for men and women analyzed separately, plasma fibrinogen is characterized by a highly significant seasonal variation (P<0.001) that can be best represented by a model that includes components with periods of 12 and 6 months. In men, this yearly pattern has a mean value of 312 mg/dl, a double circannual amplitude (extent of predictable change along the year) of 37 mg/dl, and an orthophase (time of peak value) at the end of February. As compared to men, women are characterized by a significant elevation in the yearly mean of fibrinogen (326 mg/dl, P=0.004), but the orthophase was again in February. In the absence of any significant gender difference in body mass index (30.2 vs. 29.7 for men and women, respectively; P=0.362), women in this study show significantly elevated plasma fibrinogen values as compared to men, with larger differences in the coldest months (October to February). These results could be associated with the gender differences in thrombogenic factors previously documented [Kalaria et al. Am J Cardiol. 2000;85:1401-1408].

Key Words: Fibrinogen, yearly rhythm, ambulatory blood pressure monitoring

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LOWER LEFT VENTRICULAR MASS, 24-HR BLOOD PRESSURE AND EXERCISE BLOOD PRESSURE IN FIT VS UNFIT MIDDLE-AGED MEN AND WOMEN
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Background: Twenty-four-hour ambulatory blood pressure (ABP) is directly related to left ventricular mass (LVM). Aerobic fitness is associated with lower ABP. Thus, high-fit individuals may have lower LVM when compared to those of low fitness.

Key Words: Pulse pressure, myocardial infarction, female

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Methods: We assessed cardiac structure (Echo) and fitness (Bruce) in 480 middle-aged women (age=54±10) and 385 middle-aged men (52±15), to determine the association between aerobic fitness, ABP and LVM. All were free of heart disease and antihypertensive medication. However, 45% of men and 40% of women were hypertensive. Age-adjusted groups, Low-fit (n=146), Moderate-Fit (n=157) and High-Fit (n=177) for women, and Low-Fit (n=114), Moderate-Fit (n=130) and High-Fit (n=141) for men, were formed based on exercise time to exhaustion.

Results: Significant correlations were noted between LVM index (LVMI) and daytime ABP for women (r=0.68; p=0.00) and for men (r=0.73; p=0.00). Similar correlations were also noted between ABP and exercise BP at 7 METs in women (r=0.80; p=0.00) and men (r=0.76; p=0.00). After adjusting for age and resting BP, differences (p<0.001) were observed among the three fitness groups (see table).

Conclusions: Aerobic fitness attenuates LVMI, ABP and exercise BP. The strong associations between exercise SBP at 7 METs and daytime ABP suggest that exercise BP at this level reflects the daytime hemodynamic load.

Key Words: Exercise, left ventricular hypertrophy, ambulatory blood pressure monitoring