10 responsive (R-PE) and 10 non-responsive to antihypertensive therapy (NR-PE), besides 10 healthy pregnant (HP); 2) investigated which proteins are differentially expressed between the groups and 3) found out which signaling pathways are altered between them. The study followed the Declaration of Helsinki and was approved by the Research Ethics Committee of the Ribeirao Preto Medical School, University of Sao Paulo (FMRP-USP, protocol code CAAE-37738620.0.0000.5440). We performed plasma protein quantification using mass spectrometry, the obtained data underwent bioinformatics analyses based on Uniprot, PatternLab for Proteomics, String and MetaboAnalyst softwares. Considering a fold change of 1.5, three proteins showed as significantly differentially expressed between HP and R-PE, one downregulated (transtyretin) and two upregulated (apolipoprotein C1 and hemoglobin subunit beta). Between HP and NR-PE, there were six, two downregulated (clusterin and plasmin heavy chain A) and four upregulated (apolipoprotein A-IV; heparin cofactor II; complement C4B and haptoglobin related protein). Between R-PE and NR-PE there were four, one downregulated (fibronectin) and three upregulated (pregnancy-specific beta-1-glycoprotein 1 (PSG1); complement C4B (C4B) and complement C4A (C4A). Regarding PE, C4A and C4B intensity peaks were correlated with blood pressure and creatinine levels. Both, together with PSG1, showed significant correlations with the newborn's weight and gestational week (all $p < 0.05$). These findings help to understand the pathophysiological mechanisms between the two subgroups of the disease, since the under regulated circulating proteins act in the blood pressure modulation and the upregulated may occur as compensatory mechanisms due to an inflammatory scenario. These data give insights to explain the complexity and clinical consequences of this disorder.

Keywords: Antihypertensive therapy; responsiveness; preeclampsia; proteomics.

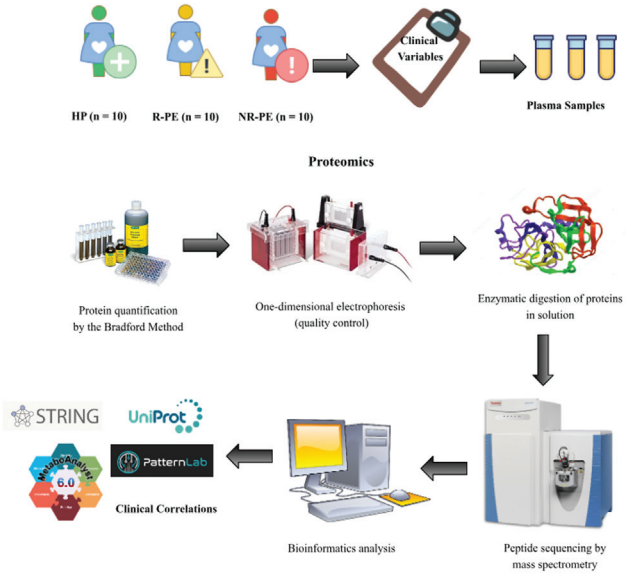

FIGURE 1. Workflow of the overall clinical study. HP; healthy pregnant; R-PE, responsive preeclampsia; NR-PE, non-responsive preeclampsia.

P094 HYPERTENSION AT ADMISSION AFFECTS THE RESULTS OF CARDIAC SCINTIGRAPHY IN THE ELDER PATIENTS WITH ISCHEMIC HEART DISEASE

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Background and Objective: The heart disease is the second most common cause of death after cancer in Japan. Since a myocardial ischemia leads directly to life prognosis, the evaluation of severity of myocardial ischemia is very important to reduce mortality in the patients with ischemic heart disease. The cardiac scintigraphy is less-invasive method to check it than cardiac catheter while results of cardiac scintigraphy are affected by aging and hypertension. The aim of this study is to evaluate the effect of both aging and hypertension at admission on the results of cardiac scintigraphy in the patients with ischemic heart disease.

Methods: We recruited 102 patients with ischemic heart disease who were admitted to Chidoribashi General Hospital and underwent cardiac scintigraphy from April 2021 to March 2023. The various parameters such as patient's profile and results of cardiac scintigraphy were collected from electric medical records retrospectively. The comparison was statistically tested using JMP Pro 17. This study was approved by our ethical committee.

Results: Thirty-one patients were under 70 years old and seventy-one patients were 70 years old or more. In elder patients, left ventricular end-diastolic volume (LVEDV), left ventricular end-systolic volume (LVESV) and the difference of LVEDV from LVESV at rest were more in the patients with hypertension at admission than in the patients without that. In contrast, no difference existed in younger patients.

Conclusions: These results suggest that aging may change the ischemic status affected by hypertension.

P095 LEFT VENTRICULAR DIASTOLIC FUNCTION IN HYPERTENSIVE PATIENTS WITH HEART FAILURE WITH PRESERVED EJECTION FRACTION

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The aim of this work was to study the prevalence of the left ventricular diastolic dysfunction and indeterminate diastolic function in sinus hypertension individuals with left ventricular hypertrophy and preserved ejection fraction, and its associated factors.

Methods. We enrolled 56 patients (aged 62, 95% confidence intervals (CI) 58–65 years, 53.6% men) with uncontrolled in-treated arterial hypertension who underwent transthoracic echocardiography (TTE, Esaote, MyLabEight). Cardiac diastolic dysfunction was defined when more than half of the TTE criteria was met according to the existing algorithm (average E/e‘, septal / lateral e‘, tricuspid regurgitation velocity, left atrium volume) and indeterminate one, when half of the criteria was encountered.

A binary logistic regression analysis (Stata 15, USA) was performed to evaluate parameters for indeterminate diastolic function state.

Results. TTE detected the left ventricular diastolic dysfunction only in 5.4%, however, 80.0% subjects had indeterminate diastolic function. Associated with the indeterminate diastolic function pattern factors were age and mitral regurgitation (odds ratios (OR) 8.0, 95% CI 2.19-29.25, p=0.002 and OR 1.06, 95% CI 1.01-1.12, p=0.014, respectively), however, not sex, height, weight, body mass index, diabetes, overweight/obese, and E/e‘. After adjustment for age, sex (female vs male) mitral regurgitation was occurred significantly more often in patients with indeterminate diastolic function in multivariate logistic regression model (OR 5.97, 95% CI1.47-24.35, p=0.013).

Conclusions. Prevalence of the left ventricular diastolic dysfunction pattern is low (5.4%) and the indeterminate diastolic function is considerable (80.0%) in cohort of hypertensions with preserved ejection fraction with sinus rhythm. Mitral regurgitation identifies as a factor that associated with the indeterminate diastolic function patterns in hypertension patients.

P096 LEFT VENTRICULAR HYPERTROPHY PATTERNS IN HYPERTENSIVE SUBJECTS WITH CHRONIC KIDNEY DISEASE

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Background and Objective. A left ventricular (LV) geometric pattern classification based on its concentrically and dilatation has been recommended for clinical practice use. However, there is no clear data demonstrating whether such categorization could improve the diagnostic strategy of adult hypertensives with chronic kidney disease (CKD).

The aim of the study was to analyze LV hypertensive patterns in adult individuals with arterial hypertension and CKD.

Methods. We studied 56 hypertension in-treated individuals with sinus rhythm (mean age, 62 [95% CI, 58–65] years, 46.4% women) using transthoracic echocardiogram (Esaote, MyLabEight). There were no pregnant women and objects engaged in professional sport. LV geometric patterns classified according to LV mass, volume, and relative wall thickness were analyzed. Moreover, CKD stages were studied with glomerular filtration rate calculation (the CKD-EPI creatinine equation).

Results. Concentric hypertrophy (24/56) for 1-4 CKD stages, mixed hypertrophy (1/56) for the 4th CKD stage, dilated hypertrophy (12/56) for 2-3 CKD stages, normal/physiological hypertrophy (14/56) for 1-3 CKD stages, and the eccentric hypertrophy (4/56) for 1-3 CKD stages were detected. Objects with the stage 1 CKD had mainly normal/physiological hypertrophy (44.4%), with stages 2 and 3 CKD had concentric hypertrophy (43% and 48%, respectively), and with the 4 CKD had the same rate of concentric and mixed hypertrophy (50%).

Conclusions. It was found different LV hypertensive geometric patterns among hypertensive individuals with CKD. Unexpectedly, there was a large amount of the normal/physiological hypertrophy pattern in arterial hypertension individuals with CKD, mainly with the stage 3.