Introduction: Perirenal fat (PRF) is associated with cardiovascular disease risk factors. Gender differences in the correlations of cardiovascular disease risk factors and PRF in the Brazilian population are lacking. Methods: Cross-sectional study with 101 (50.49% men; mean age 56.5 ± 18, range 19–74 years) drawn from the Uberlândia Heart Study underwent ultrasonography assessment of abdominal adipose tissue for the perirenal fat, a 3.5 MHz transducer was measured in the middle third of the right kidney, with the transducer positioned at the axillary midline. The exams were always performed by the same examiner. The PRF thickness was examined in relation to waist circumference, blood pressure and metabolic risk factors. Results: The PRF was significantly associated with the levels of gamma-GT (p < 0.05, r = 0.08), fasting plasma glucose (p < 0.05, r = 0.07), waist circumference (p < 0.05, r = 0.10), and metabolic syndrome (p < 0.001, r = 0.38) in men, and with the levels of fasting plasma glucose (p < 0.05, in women. Conclusion: The PRF was correlated with most cardiovascular risk factors in men and only in glucose at the women.

doi:10.1016/j.bbacli.2015.05.016

A40811
Prevalence of atherosclerosis risk factors and metabolic syndrome: The Uberlândia Heart Study

Federal University of Uberlândia, Uberlândia, MG, Brazil
University of Sao Paulo — Heart Institute, Sao Paulo, SP, Brazil

Introduction: Ectopic visceral fat (VF) and subcutaneous (SCF) fat are associated with cardiovascular risk factors. Gender differences in the correlations of cardiovascular disease risk factors and ectopic fat in the Brazilian population are still lacking. Methods: Cross-sectional study with 101 volunteers (50.49% men; mean age 56.5 ± 18, range 19–74 years) drawn from the Uberlândia Heart Study (UHS). The volunteers were examined in relation to physical examination and laboratory. Results: The mean age of the study sample was 48 W and 52 M years, and 48.5% were women, 40.2% was hypertensive, 39.3% was obese, 61.8% had abdominal obesity, 32% had hypertriglyceridermia, 33.2% low HDL-C and high LDL-C, 40.2% high total cholesterol, 33.2% high non-HDL-C, 22.7% mixed dyslipidemia, 20.2% impaired fasting glucose and 41.1% had MetS. Conclusion: The UHS study reported a high prevalence of MetS and risk factors.

doi:10.1016/j.bbacli.2015.05.017

A40812
Ectopic adiposopathy and association with atherosclerosis risk factors: The Uberlândia Heart Study

Federal University of Uberlândia, Uberlândia, MG, Brazil
University of Sao Paulo — Heart Institute, Sao Paulo, SP, Brazil

Introduction: Ectopic visceral fat (VF) and subcutaneous (SCF) fat are associated with cardiovascular disease risk factors. Gender differences in the correlations of cardiovascular disease risk factors and ectopic fat in the Brazilian population are still lacking. Methods: Cross-sectional study with 101 volunteers (50.49% men; mean age 56.5 ± 18, range 19–74 years) drawn from the Uberlândia Heart Study underwent ultrasonography assessment of abdominal visceral adipose tissue with convex transducer of 3.5 MHz of frequency. The thickness of visceral fat was ultrasonographically measured by the distance between the inner face of the abdominal muscle and the posterior face of abdominal aorta, 1 cm above the umbilicus. The subcutaneous fat thickness was measured with a 7.5 MHz linear transducer transversely positioned 1 cm above the umbilical scar. The exams were always performed by the same examiner. EVF volumes were examined in relation to waist circumference, blood pressure and metabolic risk factors. Results: The VF was significantly associated with the levels of triglycerides (p < 0.01, r = 0.10), HDL-cholesterol (p < 0.005, r = 0.15), total cholesterol (p < 0.01, r = 0.10), waist circumference (p < 0.001, r = 0.43), systolic blood pressure (p < 0.001, r = 0.41) and diastolic blood pressure (p < 0.001, r = 0.32) in women, and with the levels of triglycerides (p < 0.002, r = 0.14), HDL-cholesterol (p < 0.032, r = 0.07), glucose (p < 0.001, r = 0.15), ALT (p < 0.008, r = 0.12), gamma-GT (p < 0.001, r = 0.30), waist circumference (p < 0.001, r = 0.52), systolic blood pressure (p < 0.001, r = 0.32) and diastolic blood pressure (p < 0.001, r = 0.26) in men. SCF was significantly associated with the levels of triglycerides (p < 0.01, r = 0.34), LDL-cholesterol (p < 0.001, r = 0.36), total cholesterol (p < 0.05, r = 0.36), waist circumference (p < 0.0001, r = 0.62), systolic and diastolic blood pressure (p < 0.05, r = 0.34) in women, and with the waist circumference (p < 0.001, r = 0.065) and MetS (p < 0.05, r = 0.11) in men. Conclusion: The VF and SCF were correlated with most cardiovascular risk factors in both genders.

doi:10.1016/j.bbacli.2015.05.018

A40813
The impact of systemic inflammatory activity in the predictive value of the risk factors for atherosclerotic disease in primary prevention setting

Universidade Estadual de Campinas, Campinas, SP, Brazil

Introduction: A high cost-effectiveness has restricted the use of a thorough assessment of cardiovascular risk biomarkers to estimate cardiovascular risk in primary prevention, particularly in low-income populations. In this context, the development of screening tests has been pursued as a way to provide feasibility. Our hypothesis is that the measurement of plasma C-reactive protein (CRP) can be used in this setting and may help to select individuals in whom a detailed assessment of cardiovascular risk biomarkers is worthwhile. Methods: Asymptomatic healthy individuals (n = 320; 19–77 years old) were separated in two groups according to the plasma CRP as <0.1 mg/dL (0.00–0.96) or ≥0.1 mg/dL (0.10–3.74). A careful clinical examination was followed by plasma biochemical analyses and carotid intima–media thickness (cIMT) measurement. The presence of cIMT ≥0.90 mm was considered as the endpoint in the multivariable binary logistic regression models used to evaluate the association between cIMT across CRP and levels of metabolic or anthropometrics parameters. ROC curves were used to compare the predictive value of the atherosclerotic cardiovascular disease (ASCVD) risk algorithm in the two groups. Results: The following risk factors were associated with increased cIMT in high CRP group: age (odds ratios: 1.10; 95% confidence interval (CI): 1.05–1.15; p = 0.0001), male gender (odds ratios: 5.08; 95% CI: 1.9–13.7; p = 0.004), systolic blood pressure (odds ratios: 1.04; 95% CI: 1.01–1.07; p = 0.013), Non-high-density lipoprotein cholesterol (odds ratios: 1.02; 95% CI: 1.00–1.04; p = 0.038), Low-density lipoprotein cholesterol (odds ratios: 1.02; 95% CI: 1.00–1.04;
A40833
Effect of high protein/very low carbohydrate diet and standard hypocaloric diet in obese subjects: Nutritional, biochemical and endothelial function evaluations

Patricia N. Sakae, Henrique T. Bianco, Luciano M. Camargo, Juliana G. Carvalho, Maria C.O. Izar, Silvia S.M. Ihara, Francisco A.H. Fonseca

Universidade Federal de Sao Paulo, Sao Paulo, SP, Brazil

Introduction: A diet with carbohydrate restriction has been widely employed among people in order to achieve weight reduction. This study aimed to compare the effects of two hypocaloric diets on nutritional, biochemical and vascular parameters in obese subjects. Methods: Thirty obese subjects with body mass index class I and II, were enrolled and assigned to the two groups: A – standard hypocaloric diet (n = 5); B – high protein/very low carbohydrate diet (n = 8). Group A received 1500–1800 kcal/day. Group B was submitted to a high protein/very low carbohydrate diet, as proposed by “Dukan”. The clinical, nutritional, laboratory and endothelial function parameters were evaluated at baseline and after 3 months. All patients were followed up by a cardiologist and dietitian. The following parameters were measured in peripheral blood: iron, ferritin, glucose, insulin, HOMA-IR, total cholesterol, HDL-c, LDL-c, non-HDL-c, triglycerides, AST, ALT, urea and creatinine. Anthropometric and bioimpedance analysis were determined to nutritional evaluation. The nutritional evaluation was Endothelial Function was assessed by evaluation. The nutritional evaluation was Endothelial Function was assessed by evaluation.

Conclusions: The present study suggests that plasma CRP can be used as a screening tool to select among low-risk individuals those in whom a detailed investigation of biomarkers may be useful to identify risk factors associated with their atherosclerotic burden.

A40850
Effect of high protein/very low carbohydrate diet and standard hypocaloric diet in obese subjects: Nutritional, biochemical and endothelial function evaluations

Patricia N. Sakae, Henrique T. Bianco, Luciano M. Camargo, Juliana G. Carvalho, Maria C.O. Izar, Silvia S.M. Ihara, Francisco A.H. Fonseca

Universidade Federal de Sao Paulo, Sao Paulo, SP, Brazil

Introduction: A diet with carbohydrate restriction has been widely employed among people in order to achieve weight reduction. This study aimed to compare the effects of two hypocaloric diets on nutritional, biochemical and vascular parameters in obese subjects. Methods: Thirty obese subjects with body mass index class I and II, were enrolled and assigned to the two groups: A – standard hypocaloric diet (n = 5); B – high protein/very low carbohydrate diet (n = 8). Group A received 1500–1800 kcal/day. Group B was submitted to a high protein/very low carbohydrate diet, as proposed by “Dukan”. The clinical, nutritional, laboratory and endothelial function parameters were evaluated at baseline and after 3 months. All patients were followed up by a cardiologist and dietitian. The following parameters were measured in peripheral blood: iron, ferritin, glucose, insulin, HOMA-IR, total cholesterol, HDL-c, LDL-c, non-HDL-c, triglycerides, AST, ALT, urea and creatinine. Anthropometric and bioimpedance analysis were determined to nutritional evaluation. The nutritional evaluation was Endothelial Function was assessed by evaluation. The nutritional evaluation was Endothelial Function was assessed by evaluation.

Conclusions: The present study suggests that plasma CRP can be used as a screening tool to select among low-risk individuals those in whom a detailed investigation of biomarkers may be useful to identify risk factors associated with their atherosclerotic burden.

doi:10.1016/j.bbacli.2015.05.019

doi:10.1016/j.bbacli.2015.05.020