To determine the prevalence of insulin resistance/hyperinsulinemia and other components of the metabolic syndrome among non-obese, and obese essential hypertensives living in Buenos Aires. One hundred thirty-one hypertensives never treated or after 3 week placebo period and 31 normotensive control subjects matched for age, sex and BMI, that demonstrated normal glucose tolerance at the OGTT were included. The plasma fasting insulin (IRI) levels, the SRI (the sum of the plasma fasting insulin and IRI) levels, the SIRI (the sum of the plasma fasting insulin, IRI, and AUC of insulin) levels, and the AUC of insulin/AUC of glucose in the post-prandial periods, especially after dinner and at night. Further-

**Key Words:** Insulin Resistance, Argentine Urban Population, ABPM

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**P-493**

**METABOLIC CHANGES DURING COMPLETE BLOCKADE OF RAA IN DIABETICS HYPERTENSIVE PATIENTS**

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The Adult Treatment Panel III of the National Cholesterol Education Program recently recommended that non-HDL cholesterol be used as a secondary target of therapy in people with triglyceride levels > 200 mg/dl, especially those with diabetes or the metabolic Syndrome. Diabetes is associated with greatly increased CVD: many factors play a role in the accelerated atherosclerosis observed in diabetics. Non-HDL cholesterol, which reflects total cholesterol minus HDL cholesterol (i.e., apolipoprotein B- containing atherogenic lipoproteins), might be a useful marker of this combined risk.

**Aim of our study is verify the effects of complete block of RAA system on dislypidemia in type 2 Diabetes hypertensive patients.**

50 pts (25 male) age 70+/−12 BMI 25+/−6; Pulse pressure 65+/−17 Non HDL Cholesterol 164+/−56; TGI75+/−111; Fasting glic 166+/−50 fasting Insulin 12+/−9 HbA1c7.1+/−2 ;Creat 38+/−13 Bun 85+/−29 clear creat22+/−40 Microalbuminuria 27+/−70 were treated with Valsartan 80 plus Enalapril 10 mg/die for six months. We found significant reduction [ paired T-test correlated groups ( GB stat) ] on :

- Pulse Pressure p<.0004 r=.80 fasting insulin p<.0008 r=.80; NON-HDLc p<.002 r=.70 ;Microalbuminuria p<.03 r=.67

**Key Words:** Diabetes, Non HDL Cholesterol, RAA System

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**P-494**

**DETECTING AN RISK FACTOR OF THE METABOLIC SYNDROME IN SOUTH CAROLINA STATE UNIVERSITY FRESHMEN: OBESITY**

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**Background:** A clustering of risk factors that include obesity, hypertension, dyslipidemia and glucose intolerance are often seen in patients with cardiovascular disease (CVD) and type II diabetes. This clustering of CVD risk factors has come to be known as the metabolic syndrome. However, the specific factors that constitute the metabolic syndrome are debatable and several definitions have been established to identify this syndrome: the World Health Organization (WHO) and the National Cholesterol Education Program Treatment Panel (NCEP) use different measures of obesity in its definitions. The WHO uses total obesity measured by body mass index (BMI) as the most expressed measure of obesity in the syndrome, while NCEP includes waist circumference in its definition. It has been well established that obesity is an independent risk factor for the development of CVD and type II diabetes and that it tends to cluster with other CVD risk factors, but there is still no consensus on the appropriate or most expressed measure of obesity. The aim of this study is to evaluate measures of obesity in South Carolina State University (SCSU) freshmen with diagnosed hypertension.

**Methods:** To evaluate the relative association between BMI and waist circumference with hypertension, a cross-sectional study of 907 SCSU African American freshmen aged 17–19 will be conducted. Students will be given a Student Health and Behavior Survey, the cross-sectional survey addresses health and lifestyle behaviors. Data will be analyzed by calculating an odds ratio and 95% CI for the association between BMI and hypertension and for the association between waist circumference and hypertension using logistic regression to control for sex, family history, physical activity, diabetes, and the other measure of obesity.

**Key Words:** Obesity, Hypertension, Metabolic Syndrome

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**P-495**

**RELATIONSHIPS BETWEEN ENDOGENOUS INSULIN SECRETION AND INSULIN RESISTANCE AND BLOOD PRESSURE IN OBESITY**

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To evaluated the relationship between glucose regulation, insulin secretion and blood pressure in normotensive and hypertensive obese subjects.

We studied 12 normotensive (NT-OB) and 8 hypertensive (HT-OB) obese (BMI > 36Kg/m²) men, age 36 ± 8 yrs. And ten healthy controls (BMI = 25 kg/m²) matched for age. After overnight fasting, samples for glucose and insulin were drawn at 30 min intervals during 2 h after meals (post-prandial periods) and 60 min during the rest of the 24h (between meals and during the night). AMBP (Spacelab 90207) were performed at 20 min intervals. Subjects ingested a standard diet (2100 Kcal), divided into three meals (breakfast at 8 AM, lunch at 13:30 PM and dinner at 20 PM). We studied the insulin sensitivity by Insulin Suppression Test and also we calculated the ratio AUC insulin/AUC glucose in the post-prandial period.

Obese patients showed significant hypersecretion of insulin in basal and post-prandial periods, especially after dinner and at night. Further-

**Key Words:** Diabetes, Non HDL Cholesterol, RAA System