at all scheduled visits, and antihypertensive treatment will be adjusted whenever ABP exceeds normal values (Figure).

Results: MASTER will evaluate whether an ABPM based strategy is superior to an OBPM based strategy in changing LVmass and microalbuminuria (intermediate coprimary outcome) and in preventing CV events (secondary outcome).

Conclusions: Although the superiority of ABPM over OBPM has been repeatedly shown by observational studies, key evidence from randomized intervention trials on the actual clinical value of ABPM is still missing. The results of the MASTER study will help to clarify whether an ABPM guided treatment strategy provides a greater benefit in terms of prevention/ regression of organ damage and reduction in CV events than a strategy based on conventional OBP measurements.

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P4555 | BEDSIDE
Obesity and serum uric acid as a risk factor for hypertension and diabetes mellitus: 5-year Japanese cohort study


Background: Obesity is commonly associated with metabolic syndrome, which is known to be a risk factor for diabetes and hypertension. However, whether obesity in the absence of metabolic syndrome (“healthy” obesity) confers similar or less risk is not known. We test the hypothesis that healthy obesity still carried increased risk for hypertension and diabetes.

Methods: Study subjects consisted of Japanese adults between 30 and 85 years old were enrolled at a hospital and available at enrollment (2004) and at 5-year follow-up (2009). Subjects were excluded if they were hypertensive, diabetic, had a medication for dyslipidemia and/or gout or hyperuricemia in 2004. We divided the study subjects into BMI ≥25 kg/m² and BMI <25 kg/m², and compared the cumulative incidences of hypertension and diabetes over 5 years. Moreover, we performed a second analysis to determine if elevated serum uric acid provided additional risk for developing hypertension or diabetes, using uric acid of ≥7 mg/dL as hyperuricemia.

Results: We analyzed 9,726 subjects (49±10 years, 4,160 men). Our primary finding was that healthy obesity carried increased risk for hypertension and diabetes compared to lean/normal subjects with similar risk factors, but the overall risk was lower compared to obese subjects and metabolic syndrome (Table). An elevated uric acid was found to be an independent risk factor for the development of hypertension and diabetes in the lean/normal group (hypertension: 28.4% vs 14.6%, p<0.001; diabetes: 9.5% vs 2.6%, p<0.001), but not the obese group (hypertension: 19.8% vs 18.6%, p=0.65; diabetes: 6.6% vs 4.1%, p=0.078).

P4557 | BEDSIDE
Low birth weight and its associations with high blood pressure and body mass index in Brazilian students aged 10 to 15 years


Background: The relationship of low birth weight (LBW) with cardiovascular risk variables in young populations remains controversial and its study may contribute to the adoption of primary prevention measures.

Purpose: To analyze birth weight (BW) and its association with high blood pressure (HBP) and body mass index (BMI) in students aged 10 to 15 years from public schools in Brazil.

Methods: Cross-sectional study. BW was obtained through information provided by the parents or guardians. LBW was defined as BW ≤2,500 g. BP was measured three times by oscillometric method with OMROM HEM-1720 automatic monitor. HBP was defined when systolic blood pressure (SBP) or diastolic blood pressure (DBP) on the third measurement was ≥95th percentile for age, sex, and height. LBW was defined as birth weight ≤2,500 g. (first, second and third quartiles were 1,984, 2,300 and 2,767 g, respectively), BW ≤1,500 g. (first, second and third quartiles were 1,262, 1,655 and 2,033 g, respectively), and BW >1,500 g. and ≤2,500 g. (first, second and third quartiles were 1,806, 2,171 and 2,546 g, respectively). HBP was defined when SBP ≥120 mmHg or DBP ≥80 mmHg in two or more visits

Results: A total of 1,892 students were evaluated in the school environment. 219 (11.6%) were pre-term and were excluded from analysis. 740 (44.3%) were males and 930 (55.7%) females. 89 (5.3%) students had history of LBW. Both groups had a mean age of 12 years. The mean BW among LBW students was 2.286 g ± 3.243 g on the normal BW group. Systolic (SBP) 108±411.96 (n=257 11:14.02, p=0.48) and diastolic blood pressure (DBP) 67±25.21 (n=292 13.93, p=0.20) were lower in LBW students. BMI (n=405) of AF patients with stable INR during long-term anticoagulation treatment were identified (n=412 patients) and their characteristics were compared to a control group (n=405) of AF patients with stable INR during long-term anticoagulation treatment.

Conclusion: Healthy obesity (obesity in the absence of metabolic syndrome) confers increased risk for hypertension and diabetes. An elevated uric acid in the absence of obesity also conferred increased risk for hypertension and diabetes in lean/normal subjects but not in obese subjects. These data support the hypothesis that “healthy” obesity is not healthy, and that obesity remains a strong risk factor for hypertension and diabetes. In lean/normal subjects, the addition of uric acid levels can provide useful predictive value for risk for hypertension and diabetes.