

and Food Standard in the Serum Lipids of Low Risk Pregnant Women: A Cross-Study

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The impact of maternal dyslipidemia (DLP) on fetal injury development occurs even in situations of transient DLP during pregnancy. Some authors define gestational DLP when the CT, LDL and TG concentrations are above the 95th percentile (P95%) and HDL, below the 5th percentile (P5%) for gestational age, but there is no consensus. **OBJECTIVE:** To compare the prevalence of DLP in pregnant women using percentiles criteria with the V Brazilian Guidelines on Dyslipidemia and to evaluate the association of lipid profile with body composition, physical activity (PA) practice and dietary pattern. **Methods:** A unicentric cross-sectional study that evaluated low-risk pregnant women between 18 and 45 years old in two maternity hospitals in the city of Salvador-BA. Using a standardized questionnaire, sociodemographic data and clinical and health characteristics, nutritional status and PA practice were evaluated, as well as lipid profile measurement in any trimester of pregnancy, classifying pregnant women according to presence of DLP by two criteria. The food intake was quantified through the 24-hour food survey, obtaining the nutritional composition of the food with the aid of the NutWin® program and the intensity of the PA was assessed by means of the PA questionnaire for pregnant women (PAQP). Bioimpedance was used for body composition analysis. Statistical analysis was performed and a p value <0.05 was considered. **Results:** 165 pregnant women aged 28.6 ± 6.3 years were studied, with 57.6% in the 3rd trimester. Although only 13.9% of pregnant women were obese, with an average PGC of 36.2 ± 5.6%, there was distortion of self body image. Dairy and carbohydrate intake was out of the international recommendation range. The prevalence of any lipid alterations, according to the National Guideline criteria, was 84.7%: TC ≥ 200 mg / dL was found in 62.9%; LDL ≥ 160 mg / dL in 15.3%, HDL ≤ 50 mg / dL in 12.6% and TG ≥ 150 mg / dL in 59.6%. The prevalence of dyslipidemia by the percentile criterion was found in only 4%, with an increase higher than P95% for TC was found in 0.7%; for LDL, in 0.7%; for TG in 2.6% and below P5% for HDL in 2%. About 99.4% of the pregnant women had energy expenditure above 6.0 metabolic equivalents (METs). There was a positive correlation (p = 0.035, r=0.276) between body fat percentage and LDL values, between VLDL concentration and amount of carbohydrates ingested (p = 0.047, r 0.168) and an inversely proportional association between HDL analyzes and cervical circumference (p = 0.010, r= -0.227). There was no association of lipid profile with perception of body self-image, physical activity or eating pattern. **Conclusion:** The prevalence of dyslipidemia assessed by the criterion of the V Brazilian Dyslipidemia Guideline for adults was significantly higher than the prevalence identified by the criterion of specific pregnancy percentiles.

Cardiovascular Endocrinology

CARDIOVASCULAR ENDOCRINOLOGY

Rates of Primary Aldosteronism Screening Among High-Risk Populations

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Background: Primary aldosteronism (PA) is the most common form of secondary hypertension. PA is associated with higher cardiovascular and renal morbidity and mortality than equivalent essential hypertension. Data on PA screening rates are scarce.

Objective: To evaluate the rates of PA screening among at-risk populations.

Methods: We conducted a retrospective review of adult patients (age ≥ 18 years) with hypertension (HTN) seen in a University setting outpatient clinics between 2010–2019 who had: 1) resistant HTN; 2) HTN and hypokalemia; 3) HTN at age <40; 4) HTN and known adrenal mass; or 5) HTN and obstructive sleep apnea (OSA). We excluded patients with known high-renin HTN, renovascular HTN, or congenital adrenal hyperplasia.

Results: We identified 11,627 patients with HTN meeting at least one of the inclusion criteria. Of these, only 3.27% were ever screened for PA. Patients screened were younger (47.5 ± 17.8 vs. 51.3 ± 16.9, p <0.0001), more often women (55.28% vs. 45.71%, p=0.0003), had lower serum K⁺ (3.4 ± 0.5 vs. 3.7 ± 0.4, p<0.0001), and were more likely to have chronic kidney disease (29.27% vs. 17.5%, p<0.0001) and cerebrovascular accidents (9.21% vs. 6.16%, p= 0.02) than those never screened. While most patients in this cohort were white (79.9% vs. 15.3% black, and 2.3% Asian), screening rates were overall higher in Asian (8.4%) and black (6.1%) than in white Americans (2.8%, p<0.0001). Of the different indications for PA screening, the rates were highest among patients with adrenal nodules (35%) and lowest in patients with HTN and OSA (2.1%). The rates of screening were similar in patients younger vs. older than age 40 (3.2%, p=0.9). Among patients with resistant hypertension, those screened were on average 10 years younger (58.5 ± 14.0 vs. 68.7 ± 12.8, p<0.0001) and twice as often black (20.7% vs. 10.1%) compared to those not screened for PA. Conversely, in patients with adrenal masses, there were no sex, age, or race differences between those screened vs. not screened for PA. PA screening was initiated most often by general internists (53.9%), followed by endocrinologists (15.8%), and rarely by nephrologists (9.5%), or cardiologists (4.2%).

Conclusions: Despite its high prevalence and associated cardio-renal morbidity, PA screening is pursued in only 3% of high-risk populations. While patients screened are generally younger and more often black than those not screened, the diagnosis is often suspected after complications have already developed. These data indicate that initiatives to encourage PA screening are crucial for preventing cardiovascular and renal morbidity in many patients with HTN.