

important to reduce or maintain normal body weight, because weight gain is associated with fatty liver and following CVD risk.

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Gender obesity-related high-density lipoprotein level inequities in North African adults

El Atti J¹, Hsairi M², Gartner A³, Aounallah-Skhiri H², Traissac P³, Ben Rayana C¹, Haddad S¹, Delpeuch F³

¹National Institute of Nutrition and Food Technology, Tunis, Tunisia,

²National Institute of Public Health, Tunis, Tunisia, ³Institut de Recherche pour le Développement (IRD), UMR Nutripass IRD-UM2-UM1, Montpellier, France

Introduction: North African countries are facing rapid increases in obesity, which is classified as a major modifiable risk factor for coronary artery disease (CAD). As the variation in high-density lipoprotein cholesterol (HDLc) levels is an important CAD risk factor in obese states, this study aimed at describing the magnitude of abnormal HDLc levels among Tunisian obese adults and exploring the relationship between these co-morbidities by gender.

Methods: Cross-sectional survey (2009) in the Great Tunis. Two-stage stratified random cluster sample: 2619 adults (20–49 y). Body Mass Index=weight/height² ≥30 kg/m² defined obesity; waist-to-height ratio>=0.60 described abdominal adiposity. Recommended cut-offs of plasma HDLc levels defined low HDLc (<35 mg/dL for men and <40mg/dL for women), high HDLc (>=60 mg/dL for both genders). Adjusted associations for some confounding variables (area, age, profession, education, economic level, physical activity level, energy consumption and smoking) were assessed.

Results: In obese vs. non-obese women, prevalence of low HDLc was higher (18.7% [14.4–23.8] vs. 11.8% [9.0–15.3], p<0.0001) and high HDLc was lower (19.3% [15.5–23.8] vs. 30.9% [25.8–36.6], p<0.0001). In men, both low and high HDLc were not different between obese and non-obese (18.3% [11.6–27.5] vs. 19.1% [14.4–25.0]) and (5.2% [2.5–10.7] vs. 8.1% [6.1–10.8]), respectively. Similar gender differences were observed regarding abdominal adiposity. Multivariate analysis, only in women, obesity was positively related to low HDLc (OR=1.5 [1.1–2.1], p=0.032) and both obesity and abdominal adiposity were negatively associated to high HDLc (OR=0.6 [0.4–0.8], p=0.003 and OR=0.6 [0.5–0.8], p=0.001, respectively).

Conclusion: It is necessary to elucidate the mechanisms underlying gender obesity-related lowering HDLc levels differences. This is particularly of concern as obesity is more prevalent in women than men.

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The role of adherence to treatment in patients with metabolic syndrome

Martemyanova EG

Preobrazhenskaya Clinic, Yekaterinburg, Russian Federation

Introduction: Metabolic syndrome (MS) increases the likelihood of various diseases, especially liver fibrosis. Low adherence to treatment (AtT) in patients with MS is one of the greatest problems for the physicians.

Aim: To evaluate the AtT and to determine association between adherence and liver stiffness in patients with MS.

Methods: In cross-sectional study were examined 80 people with MS, mean age 42.56±9.8, 95% IC 39.91–45.21. Weight, height, body mass index (BMI), alcohol intake (g/day), a blood samples (ASAT/ALAT, GGT, total and free bilirubin, cholesterol and triglycerides, viral hepati-

tis B, C and HIV antibodies, thyrotrophic hormone) and liver stiffness measurement (LSM) were assessed at first, 12 and 36 months later. AtT was evaluated by questionnaire.

Results: The share of AtT people was 39.64%; subjects with high adherence had significantly lower liver stiffness (LS) – 6.12 kPa; 95% IC 6.01–6.23; p<0.03. Non-AtT patients had LS 7.83 kPa, 95% IC 7.56–7.99; p<0.021. LSM was correlated with AtT, gender, BMI and alcohol intake.

Conclusion: In this study some patients with MS had a low AtT, but those who lead clinical recommendations, had better liver stiffness, then others. After 3 year treatment AtT-people had reduction stage of liver fibrosis. New researches should be performed in different groups of patients with MS for assessment prognostic significance of adherence.

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Obesity and 5-y risk of dementia in Chilean older people

Albala C, Sanchez H, Lera L, Angel B, Fuentes-Garcia A, Cea X

INTA, University of Chile, Santiago, Chile

Introduction: Recent studies have shown obesity as an independent risk factor for future dementia

Objective: To study the 5y risk of dementia according prior obesity in community-living Chilean older adults.

Methods: Alexandros is a cohort study designed to study disability related to obesity in Chilean older people. In 2004/2005 home interviews including history of chronic diseases, self-reported disability/functional limitations, screening test for dementia, physical performance, anthropometry, dynamometry and blood pressure were done in 1071 people from whose 886 were free of dementia. Available participants in 2010 were 554 (70.2% women), 100 were died and 234 were lost to follow up. From those, a subsample of 137 people had baseline leptin measurements. At baseline 35.9% of the participants had IMC ≥30 Kg/m² (26.7% of men and 37.6% of women). Dementia was defined with a test validated for Chile consisting in MMSE score<22 and a score >5 in the Pfeiffer activities questionnaire.

Results: The 5y risk for dementia was 13.4% similar for both sex. Obesity at baseline was associated with the incidence of dementia 5y later in women (10.3% in non-obese vs 18.2% in obese, p<0.03) but not in men. After logistic regression adjustment the RR of having dementia was higher in obese than in non-obese (RR=1.67, 95%CI 1.003–2.772, p<0.05) and increased with age (RR=1.04, 95%CI 0.996–1.085; p=0.078). No association with gender neither diabetes nor hypertension was observed. No association of baseline plasma leptin with dementia was found.

Conclusion: The results allow for considering obesity as an independent risk factor for dementia

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Dissecting individual experiences to reach a more comprehensive understanding of weight regulation in Polycystic Ovary Syndrome

Cooper GD

Durham University, Durham, United Kingdom

Introduction: Polycystic Ovary Syndrome (PCOS) is an endocrinopathy affecting 5-10% of women worldwide. The PCOS symptomatology spectrum includes polycystic ovaries, infertility, irregular menstruation, acne and hirsutism, predominantly caused by excess androgen production. It is estimated up to 75% of the PCOS population are obese, this is a significant public health concern and could account for a significant portion of obesity prevalence in adult females. Females diagnosed with PCOS (irrelevant of their BMI) are at increased risk of developing characteristics of the metabolic syndrome (insulin resistance, dyslipidemia). PCOS symptomatology can be improved by modest weight loss, although achieving weight loss is challenging for many women.