Epidemiologic study on the insulin resistance syndrome study group. High baseline insulin levels associated with 6-year incident observed sleep apnea

Submitted by Emmanuel Lemoine on Wed, 12/11/2013 - 17:07

Titre Epidemiologic study on the insulin resistance syndrome study group. High baseline insulin levels associated with 6-year incident observed sleep apnea

Type de publication Article de revue

Auteur Balkau, Beverley [1], Vol, Sylviane [2], Loko, Sandrine [3], Andriamboavonjy, Tiana [4], Lantieri, Olivier [5], Gusto, Gaelle [6], Meslier, Nicole [7], Racineux, Jean-Louis [8], Tichet, Jean [9], Epidemiologic Study on the IRSS Group, [10]

Editeur American Diabetes Association

Type Article scientifique dans une revue à comité de lecture

Année 2010

Langue Anglais

Date 2010/05

Numéro 5

Pagination 1044 - 1049

Volume 33

Titre de la revue Diabetes care

ISSN 1935-5548

Mots-clés Adult [11], Aged [12], Body Mass Index [13], Diabetes Mellitus, Type 2 [14], Female [15], Humans [16], Incidence [17], Insulin resistance [18], Male [19], Middle Aged [20], Obesity [21], Prevalence [22], Risk Factors [23], Sleep Apnea Syndromes [24], Smoking [25], Triglycerides [26], Waist Circumference [27]
OBJECTIVE: Obstructive sleep apnea is common in patients with type 2 diabetes, and its association with insulin and insulin resistance has been examined in cross-sectional studies. We evaluate risk factors for incident observed sleep apnea in a general population not selected for sleep disturbances.

RESEARCH DESIGN AND METHODS: A total of 1,780 men and 1,785 women, aged 33 to 68 years, from the cohort Data from an Epidemiologic Study on the Insulin Resistance Syndrome (D.E.S.I.R.) responded to the question, “Has someone said to you that you stop breathing during your sleep?” at baseline and 6 years. Anthropometric, clinical, and biological factors were recorded at both time points. RESULTS: At baseline, 14% of men and 7% of women reported having observed sleep apnea (positive response to question); 6-year incidences were 14 and 6%, respectively. Age, anthropometric parameters, blood pressure, and sleep characteristics were all associated with prevalent, observed apnea episodes, in both sexes. Baseline waist circumference was the strongest predictor of incident apnea: standardized odds ratio (OR), adjusted for age and sex, 1.34 (95% CI 1.19-1.52). After adjustment for age, sex, and waist circumference, the standardized ORs for incident observed apnea were identical for fasting insulin and the homeostasis model assessment of insulin resistance: 1.31 (1.13-1.51) and 1.24 (1.09-1.41) for triglycerides and 1.52 (1.12-2.05) for smoking. Observed apnea at baseline was not associated with changes in anthropometric or biological parameters over the 6-year follow-up. CONCLUSIONS: The most important baseline risk factor for incident apnea was adiposity. After accounting for adiposity, other risk factors were high insulin, insulin resistance, high triglycerides, and smoking, factors amenable to lifestyle intervention.
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[29] http://dx.doi.org/10.2337/dc09-1901

Publié sur Okina (http://okina.univ-angers.fr)