

Obstructive sleep apnea syndrome and metabolic syndrome in thin patients: Characteristics and comparison with patients with overweight and obesity

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Objective: To know the prevalence of obstructive sleep apnea syndrome (OSAS) and metabolic syndrome (MS) in thin patients and their demographic characteristics. We also want to know if there are epidemiologic differences with overweight and obese patients.

Methods: We studied all the patients that were referred to our sleep laboratory, from January to December 2009. The patients underwent polysomnography and respiratory polygraphy. OSAS was diagnosed when apnea hipopnea index (AHI) was >5. MS was diagnosed according to the International Diabetes Federation criteria. The patients were distributed in three groups according to their body mass index (BMI): normal weight or thin patients (BMI <25), overweight (BMI 25-29.9) and obesity (BMI ≥30).

Results: We studied 475 patients: 7.60% with normal weight, 36% overweight and 56.40% obese.

In the group of the thin patients, most of them were women (55.60%), snorers (63.90%), non-smokers (66.70%) and non-drinkers (83.30%).

We diagnosed of OSAS 428 (90.10%): in the group of thin patients 77.70%, in overweight 84.79% and in obese 91.40%. Thin patients with OSAS' diagnose were mostly mild OSAS (64.28%), in overweight group were mostly moderate OSAS (41.38%) and in obese group were mostly severe OSAS (57.90%). There were significant differences ($p < 0.001$) between OSAS' diagnose and categorized BMI.

We diagnosed of MS 288 (64.40%): in the thin group 33.33%, in overweight 43.94% and in obese 80.93%. We found more probability of MS ($p < 0.001$) with BMI's increase.

There were differences between thin group and the others, in the first they were younger with minor neck and waist perimeter ($p = 0.021$; $p < 0.001$; $p < 0.001$). OSAS and MS prevalence in the thin group were 22% and in obese 70.52% ($p < 0.001$). OSAS in thin patients was related with gender ($p = 0.039$, women had less risk) and age ($p = 0.045$, OSAS patients were older).

Conclusions: OSAS' prevalence in thin patients is minor than in overweight and obese. OSAS and MS' prevalence in thin patients versus obese patients is minor. Thin patients were more frequently women, younger and without toxic habits. OSAS in thin patients was related with gender and sex, but OSAS and MS were not related.

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