

## البحث السابع

(7) بحث مشترك غير مستخلص من رسالة:

عنوان البحث باللغة الانجليزية:

**Recent Potential Biomarkers for Obstructive Sleep Apnea and the Effect of Continuous Positive Airway Pressure Therapy.**

الملخص الإنجليزي:

**Background:** C - reactive protein (CRP) and cysteine (Cys) are important risk factors for atherosclerosis, coronary heart disease and metabolic comorbidities. In the present study, we examined serum levels of CRP and Cys in obstructive sleep apnea (OSA) in comparison to habitual snorer non-OSA patients. In addition, we investigate the possible effect of obesity on these variables, and the effect of continuous positive airway pressure therapy (CPAP).

**Methods:** Serum levels of CRP and Cys were measured in 40 patients with OSA before and after CPAP. A group of 40 non-OSA habitual snorer matched for age and gender were also participated as control group. A subgroup of lean OSA patients (body mass index "BMI" < 25 kg/m<sup>2</sup>) was analyzed to rule out the influence of obesity.

**Results:** CRP and Cys plasma levels were higher in patients with OSA compared with the control subjects. A subgroup of lean patients (BMI < 25Kg/m<sup>2</sup>) with OSA also had higher CRP and cysteine plasma levels than the control subjects. Furthermore, patients with OSA who received CPAP showed a decrease in plasma levels of these markers after 3 months of CPAP.

**Conclusion and recommendations:** CRP and Cys are elevated in OSA patients that not affected by obesity and decreased by CPAP. These

markers can be considered as potential biomarkers for OSA, which is associated with increased risks for cardiovascular morbidity and mortality. In addition, CPAP may be useful tool for decreasing these risks.