Association between obstructive sleep apnea (OSA) and depression and the effect of continuous positive airway pressure (CPAP) treatment

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Background: Obstructive sleep apnea (OSA) is a relatively common disorder which has a negative impact on the psychological well-being of affected individuals. Objective: To assess the association between OSA and depression as well as the effect of treatment with continuous positive airway pressure (CPAP).

Methods: A total of 37 newly diagnosed individuals with OSA underwent an overnight polysomnography and were assessed using the Epworth Sleepiness Scale (ESS), the Hamilton Depression Rating Scale (HDRS), and the Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Patients were assessed before and after 2 months of CPAP use. Results: Of the 37 patients included in the study, 21 (56.7%) had clinically relevant depression as indicated by a score .10 on the HDRS and eleven patients (29.7%) met the diagnostic criteria for a major depressive episode using the Structured Clinical Interview. Scores on the HDRS were correlated with the Apnea Hypoxia Index, ESS scores, and oxygen saturation. Patients showed a significant reduction in depressive symptoms and improvement in ESS scores after CPAP treatment. Conclusion: Patients with OSA should be screened carefully for depressive disorders. CPAP should be tried first before starting other treatment modalities for depression.