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Titel des Beitrags: Cardiac workload in patients with sleep-disordered breathing early after acute myocardial infarction.

Abstract: Sleep-disordered breathing (SDB) may promote an increase in cardiac workload early after acute myocardial infarction (AMI). We tested the hypothesis that in the early phase after AMI, SDB is associated with increased 24-h arterial BP, heart rate (HR), and, thus, cardiac workload. In this prospective study, 55 consecutive patients with AMI and subsequent percutaneous coronary intervention (78% men; mean age, 54 ± 10 y; mean BMI, 28.3 ± 3.6 kg/m²; mean left ventricular ejection fraction [LVEF], 47% ± 8%) underwent polysomnography and 24-h ambulatory BP and heart rate monitoring within 5 days after MI. Cardiac workload was calculated as systolic BP multiplied by HR. The presence of SDB was defined as >= 10 apneas and hypopneas per hour of sleep. Fifty-five percent of the patients had SDB, of which 40% was predominantly central in nature. Patients with SDB had higher 24-h HR and systolic and diastolic BP compared with those without SDB (115 vs 108 mm Hg, P = .029; 71 vs 67 mm Hg, P = .034; 69 vs 64 beats/min, P = .050, respectively). Use of antihypertensive medication and β-receptor blockers was similar in both groups. In a multivariate linear regression analysis, SDB was significantly associated with an increased 24-h cardiac workload.
(?-coefficient, 0.364; 95% CI, 0.071-0.657; P = .016), independently of age, sex, BMI, LVEF, and antihypertensive medication. Patients with AMI and SDB have significantly increased 24-h BP, HR, and cardiac workload. Treatment of SDB may be a valuable nonpharmacologic approach to lower cardiac workload in these patients.