Prevalence, Characteristics and Compliance to Treatment of Obstructive Sleep Apnea in CHD Patients

Baharav, Anda\textsuperscript{1}; Ofir, Hagit\textsuperscript{2}; Kidman, Gizela\textsuperscript{3}; Kobal, Sergio\textsuperscript{3}; Henkin, Yaakov\textsuperscript{3}

\textsuperscript{1}Wingate Sports Institute, Sleep Laboratories, Netanya, Israel; \textsuperscript{2}Ben Gurion University, Faculty of Health Sciences, Beer Sheva, Israel; \textsuperscript{3}Soroka University Medical Center, Cardiology, Beer Sheva, Israel

Background: Obstructive sleep apnea (OSA) is commonly associated with obesity, diabetes, hypertension, CHF and atrial fibrillation, conditions that are also related to coronary heart disease (CHD). It is unclear if and which patients with CHD should be routinely screened for OSA.

Aim: to evaluate the prevalence, characteristics and response to treatment recommendations of OSA in unselected patients with stable CHD presenting for routine followup in a cardiology clinic.

Methods: During a period of 6 months, all patients with stable CHD presenting for routine followup in pre-specified cardiology clinics were offered to participate in the study. Excluded were patients with chronic AF, a pacemaker, those that had undergone a sleep study previously and those that resided beyond 50 km of the hospital. Participants underwent a sleep history, sleep questionnaires, anthropometric measurements and an ambulatory partial sleep study. Clinical and laboratory data were extracted from the clinic computerized database.

Results: Of the 249 patients screened, 90 had exclusion criteria and 54 had previously undergone a sleep study. Amongst the 105 patients enrolled, the average age was 67.4 ± 8.8 years and 89% were men. OSA was found in 42% of the patients, with 24% having moderate or severe OSA (RDI > 15). OSA prevalence was increased in patients with BMI \geq 30 kg/m\textsuperscript{2} (60%), but not amongst hypertensives and diabetics ((43% and 40% respectively). Of the 35 patients offered therapy only 24 agreed to meet with a sleep specialist, of which 3 improved after weight loss, 10 tried using CPAP but only 4 finally purchased the machine.

Conclusion: OSA is extremely common in patients with stable CHD. Screening should be considered in all such patients, but is especially justified in those with obesity. However, willingness to receive treatment is very low in these asymptomatic patients, and strategies to improve compliance should be explored.