**SLEEP-TIME BLOOD PRESSURE AS A THERAPEUTIC TARGET FOR CARDIOVASCULAR RISK REDUCTION**

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Objectives: Independent studies have concluded that elevated sleep-time blood pressure (BP) is a better predictor of cardiovascular risk than the awake or 24h BP means. However, the impact on cardiovascular risk of changes in these ambulatory BP characteristics has not been properly investigated. We evaluated whether increased survival is more related to the progressive decrease of asleep or awake BP.

Methods: We prospectively studied 3344 subjects (1718 men/1626 women), 52.6±14.5 years of age, during a median follow-up of 5.6 years. Those with hypertension at baseline were randomized to ingest all their prescribed hypertension medications upon awakening or at least 1 of them at bedtime. Ambulatory BP (ABPM) was measured for 48h at baseline, and again annually or more frequently (quarterly) if treatment adjustment was required.

Results: Using data collected either at baseline or at the last ABPM evaluation per participant, when asleep BP mean was adjusted by awake mean, only the former was a significant predictor of outcome in a Cox proportional-hazard model adjusted for sex, age, diabetes, anemia, and chronic kidney disease. Analyses of changes in ambulatory BP during follow-up revealed a 17% reduction in cardiovascular risk for each 5 mmHg decrease in asleep systolic BP mean (P<0.001), independently of changes in any other ambulatory BP parameter.

Conclusions: The sleep-time BP mean is the most significant prognostic marker of cardiovascular morbidity and mortality. Most important, the progressive decrease in asleep BP, a novel therapeutic target that requires proper patient evaluation by ambulatory monitoring, was the most significant predictor of event-free survival.