



MID-DAY SLEEP EFFECTS AS POTENT AS RECOMMENDED LIFESTYLE CHANGES IN PATIENTS WITH ARTERIAL HYPERTENSION

Poster Contributions
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Authors: *Leonidas Poulimenos, Manolis Kallistratos, Pavlos Tsinivizov, Nikolaos Kouremenos, Nestoras Kontogiannis, Andreas Pittaras, Andreas Triantafyllis, Aggeliki Koukouzeli, Konstantinos Kyfnidis, Athanasios Manolis, "Asklepeion" General Hospital, Voula, Greece*

Background: Lifestyle changes decrease blood pressure (BP) levels by 3 to 5 mmHg in patients with arterial hypertension. This study had the purpose to assess the effect of mid-day sleep on blood pressure levels in hypertensive patients.

Methods: We prospectively studied two hundred and twelve (212) hypertensive patients. Mid-day sleep time (in minutes), life style habits, anthropometric characteristics, were recorded and office BP, ambulatory blood pressure monitoring, pulse wave velocity (PWV), augmentation index (AI) were measured. A standard doppler and tissue-doppler echocardiographic evaluation was performed

Results: 53.8% of the patients were female, the mean age was 62.5±11.0 years while the mean body mass index was 28.9±5.4kg/m². The mean value of average 24h systolic and diastolic BP (SBP & DBP) were 129.9±13.2/76.7±7.9 mmHg respectively. Most of the subjects (74.6% of the sample) were non-smokers and didn't have diabetes mellitus (74.6%). The mean midday sleep duration was 48.7±54.3 min. Average 24 hours SBP (127.6±12.9 mmHg vs 132.9±13.1 mmHg), average day SBP & DBP were lower in the patients who sleep at midday, compared to those who don't (128.7±13/76.2±11.5 vs 134.5±13.4/79.5±10.4 mmHg) (p<0.005). The effect was not correlated to the dipping status of patients. The midday sleep duration was negatively correlated with average 24 hour SBP & day SBP. In a linear regression model, for every 60 min of midday sleep, 24h average SBP decreases by 3 mmHg (p<0.001). There were no differences in the number of antihypertensive medications, PWV, AI or echocardiographic indices (left ventricular wall thickness, left atrial size) between the groups.

Conclusion: Mid-day sleep significantly decreases average and day SBP/DBP in hypertensives. Its effect is as potent as other well-established life style changes and is independent of the dipping status of patients. It should be recorded in patients' history and encouraged if applicable to their daily schedule.