of available data suggests, however, that in children, at variance with adults, ABP being higher than OBP in children 10 years old and equal or lower in older. Table 1 hereafter show the distribution of 24h ABP differences for S and D in respect to office value. No gender difference was observed and the same results were found both during the day and night. Conclusions: In younger children ABPM measures higher BP values than the office measurements, while the pattern in older children is more similar to that of adults (office higher than ABP). It can be speculated that younger children either are more sensitive to the discomfort caused by ABPM or their higher level of activity is responsible for the reported pattern. Whatever the interpretation, it is of paramount importance to keep this age specific pattern into consideration when using ABPM to diagnose hypertension and to control the efficacy of the treatment in this age group.

8C.05 RELATIONSHIP BETWEEN NOCTURNAL BLOOD PRESSURE PATTERNS AND DAYTIME BLOOD PRESSURE VARIABILITY IN THE SPANISH AMBULATORY BLOOD PRESSURE MONITORING REGISTRY

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Objective: Different abnormal patterns of nocturnal blood pressure (BP) including nocturnal hypertension, absent or excessive night-time BP fall, as well as increased short-term BP variability have been reported to be associated with an increased risk of cardiovascular events. However, it is not clear whether any relationship exists between different nocturnal BP patterns and daytime BP variability. The aim of the present study was to address this issue taking advantage of the large number of subjects included in the Spanish Ambulatory Blood Pressure Monitoring Registry.

Methods: We studied 18405 subjects (mean age: 52.7 ± 14.3 years, male 54%) not on antihypertensive medication for at least 2 weeks. Ambulatory BP monitoring was performed with SpaceLab’s 90207 devices. BP variability was quantified as standard deviation (SD) of daytime (10 a.m.-10 p.m.) values. Data were analyzed by different models, subdividing subjects into: 1) categories of day/night systolic BP pattern [risers (R): < 0% nocturnal SBP fall, nondippers: 0%–5% (ND1) and 5%–10% (ND2), dippers (D): 10%–20%, extreme dippers (ED): > 20%] and 2) quintiles of mean night-time (mid-night-6 a.m.) SBP. The differences between categories were assessed by means of an ANCOVA model adjusted for age, BMI, gender, smoking, diabetes, dyslipidemia, previous cardiovascular disease, renal insufficiency and mean 24h SBP (Model 1) or mean awake SBP (Model 2). Post hoc analysis with Bonferroni correction was used for multiple comparisons.

Results: Significant differences in daytime SBP SD were found between day/night SBP fall categories (p < 0.0001) and between night-time SBP quintiles (p < 0.0001) (see Figure).

Conclusions: Untreated subjects with very high or very low nocturnal BP, as well as with “risers” and “extreme-hyercme–dippers” SBP profile show increased short-term BP variability during the awake period even after adjustment for major confounders. This relationship may reflect an increased sympathetic activity in these subjects. Studies on the clinical relevance of these ambulatory BP patterns should thus not disregard such an association.