Design and method: Given 24-hour ambulatory BP measurements (ABPM) elPP and stPP were determined from the ratio between the variability of systolic BP (SBP) and diastolic BP (DBP) following previously described procedure. The effect of HR on PP, elPP and stPP was investigated by ANOVA taking for convenience, as the factor, grouped values of heart period (HP, equals 60/H) with covariates adjustment for age, gender, body mass index, treated hypertension and diabetes, and SBP and HR dipping, and applying post-hoc comparisons.

Results: ABPM records of 1,999 hypertensive patients were analyzed [age 56 ± 16 years, 55% women, 60% on medication and 9% diabetes, average BP 139/79 mmHg and HR 71 beats per minute (bpm)]. HP grouped values 0.70–0.75; 0.75–0.8; 0.8–0.85; 0.85–0.9; 0.9–0.95; 0.95–1.0; > 1.0 sec, respectively. Mean ± SD of PP, elPP and stPP were 60 ± 14, 50 ± 10 and 10 ± 8 mmHg. Both PP components increased for greater HP, i.e. lower HR (see figure). The absolute differences in PP, elPP and stPP between the first-to-last HP-groups were 11.3, 5.2 and 6.1 mmHg (P<0.00001 for all) and % difference/mean were 19%, 10% and 61%, respectively. The most significant changes in PP components occurred in the slow HR range (see figure). A similar analysis by ANOVA showed gradual DBP decrease by 11 mmHg (14%, P<0.00001) and a SBP reduction by 4 mmHg (3%, P<0.05).

Conclusions: Slower heart rate in hypertensive patients is accompanied by greater ambulatory pulse pressure, largely contributed by the tendency of arteries to stiffen at elevated pressures, and lower diastolic pressure, probably caused by the prolonged pressure decay during the longer diastole accompanied by greater stroke volume.

**3C.05**

**DIAGNOSTIC AGREEMENT OF THE EUROPEAN SOCIETY OF HYPERTENSION HOME BLOOD MONITORING SCHEDULE WITH AMBULATORY BLOOD PRESSURE MONITORING IN UNTREATED AND TREATED SUBJETCTS**


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Objective: To assess the diagnostic performance of the European Society of Hypertension (ESH) minimum (3-day) and full (7-day) home blood pressure monitoring (HBPM) schedule compared to ambulatory blood pressure monitoring (ABPM) in detecting hypertension phenotypes in untreated and treated subjects.

Design and method: 638 patients attending a hypertension clinic (mean age 53.7 ± 10.9 years, mean 56.4%, untreated 66.9%) had measurements of clinic blood pressure (CBP) (3 visits, duplicate measurements), HBPM (7 days, duplicate morning and evening measurements) and 24-hour ABPM within 6 weeks. The diagnostic accuracy of 3-day and 7-day HBPM schedules was assessed by taking ABPM as reference.

Results: Using the day 2-7 HBPM schedule and taking awake ABPM as reference, sustained hypertension, masked hypertension phenomenon and white coat phenomenon were diagnosed in 49.2±8.3%, 3C.05 and 29.8% respectively. The sensitivity, specificity, positive and negative predictive value of HBPM in detecting sustained hypertension were 91/779/90/78% respectively (agreement 87%, kappa 0.68) in untreated and 87/93/83/95% (agreement 92%, kappa 0.79) in treated subjects; masked hypertension phenomenon 66/98/78/96% (agreement 94%, kappa 0.68) in untreated and 56/65/77/88% (agreement 80%, kappa 0.41) in treated subjects; white coat phenomenon 41/93/43/92% (agreement 87%, kappa 0.35) in untreated and 68/96/74/94% (agreement 92%, kappa 0.66) in treated subjects. In untreated subjects a 3-day schedule provided similar agreement with ABPM as the 7-day schedule for diagnosing hypertension phenotypes, whereas in treated the diagnostic agreement was improved when including measurements beyond the third day. In untreated subjects discarding the first HBPM day had no impact on the diagnostic agreement with ABPM, whereas in treated there was a small improvement in the agreement. Using 24-hour instead of awake ABPM gave marginally superior agreement with HBPM.

Conclusions: In both untreated and treated subjects the minimum HBPM schedule (3-day) recommended by the ESH appears to have comparable diagnostic agreement with ABPM as the full 7-day schedule. Discarding the first day seems to have no impact in untreated subjects, whereas in treated it slightly improves the diagnostic performance.

**3C.06**

**EMOTIONAL INTELLIGENCE AND PSYCHOLOGICAL STATUS WERE RELATED WITH WHITE COAT EFFECT AND MEAN AMBULATORY BLOOD PRESSURE LEVELS IN PATIENTS WITH ARTERIAL HYPER TENSION**

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Objective: The aim of our study was to determine relationship between emotional intelligence (EI), psychological status (PS) and mean ambulatory blood pressure monitoring (ABPM) level, white coat effect (WCE) in untreated patients with arterial hypertension (AH).

Design and method: We analyzed 150 ambulatory blood pressure monitoring (ABPM) data of AH patients without serious concomitant diseases. ABPM monitor (Spacelabs 90207) was applied after the washout period. We defined daytime period as 8 a.m.–22.00 (BPd), nighttime – 0.00–6.00 (BN). After ABPM session patients completed the PS and EI questionnaire: “Minnesota Multiphase Personality Inventory” (MMPI) and “EmDn Questionnaire (by Lyusin D.). We assessed following EmDn scale scores: I - emotion self-awareness; II - management of one’s own emotions; III - control of emotional expression; IV - understanding others’ emotions; V - management of others’ emotions. We used Spearman Partial Coefficient for correlation (r) analysis adjusted for age, sex and duration of AH.

Results: The mean daytime systolic BP (SBP) was 139.1 ± 12.7, diastolic (DBP) - 83.1 ± 9.9 mm Hg (M ± SD). We found the following correlations (p>0.05): 1) 9 MMPI scale scores (energy, optimism, good mood) with WCE for SBP (r=0.28) and mean clinical BP (r=0.25); 2) II scale scores (control of emotional expression) with WCE for DBP (r=0.24); 3) III scale scores (emotion self-awareness) with mean clinical SBP (r=0.27); 4) IV scale scores (understanding others’ emotions) with mean clinical DBP and SBP (r=0.34, r=0.31) and with mean ambulatory DBP and SBP. For mean 24 hours SBP, SBPd r=0.25 and r=0.25, for 24 hours DBP, DBPd r=0.30, r=0.29, r=0.24 respectively. Energy, optimism, good mood (9 MMPI scale scores) and good emotion self-control levels (1 scale scores) had a negative correlation with WCE levels and mean clinical SBP. Perception of own or other people’s emotions (II and IV scale scores) positively correlated with levels of clinical and ambulatory BP.

Conclusions: Energy, optimism, good mood and good emotion self-control in AH patients at the clinic may reduce WCE and mean clinical SBP levels. Excessive perception of their own or other people’s emotions (II and IV scale scores) can lead to increased clinical and ambulatory BP levels.

**3C.07**

**ARE THE PHYSICIANS RELUCTANT TO PRACTICE TELEMEDICINE IN HYPERTENSION??**


Objective: The high number of patients with uncontrolled hypertension is still a public health pattern. The e-health contains all electronic health services used in order to improve communication between all the different actors. In arterial hypertension, few data exists on the possibilities: 1/ for patients to easily e-transfer their results of home blood pressure measurement (HBPM); 2/ for practitioners to receive and assess these HBPM results. Furthermore, physician’s reluctance is often reported as a constraint for telemedicine development. Thus, we aimed to collect data on technical equipment of physicians, and on their expectations about this new way of relationship.

Design and method: 57 physicians, hypertension specialists (36 ± 8 years old, 56% men, mostly (88%) hospital practitioners) completed a self-administered questionnaire.

Results: The prevalence of technical equipment is summarized in Table 1. 77.1% of physicians thought that telemedicine could improve the control of hypertension, 29.8% thought they could provide less frequent consultations to their patients and...