(-16.7g; -10% compared to baseline) and in F (-4.5g; -3% compared to baseline). At baseline the highest correlation to LVMI was shown by ambulatory pulse pressure during nighttime (r = 0.6, p = 0.004) and s-BP (r = 0.7, p < 0.0001). At follow-up LVMI was significantly predicted only by mean nighttime s-BP (r = 0.564, p = 0.012) and ambulatory pulse pressure during 24 h (r = 0.462, p = 0.035) and nighttime (r = 0.531, p = 0.013). The regression in LVMI was significantly related only to reduction in mean and diastolic s-BP (r = 0.428/0.454, p = 0.037/0.026 respectively) under therapy.

It is concluded that C and F are equally effective in reducing LVMI. The highest predictive power for LVMI was given by ambulatory nighttime pressure and pulse pressure. Changes in LVMI were only predicted by self recorded-BP. These results underline the importance of ambulatory as well as self recorded BP in the management of hypertensives.

Key Words: ambulatory blood pressure, self-recorded blood pressure, left ventricular hypertrophy

P-60
UTILITY OF AMBULATORY BLOOD PRESSURE MONITORING IN A HYPERTENSIVE SPECIALTY CLINIC

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Ambulatory blood pressure monitoring (ABPM) has failed to gain widespread use in clinical practice or receive recognition from health plans as a valid diagnostic tool. Recent clinical trial evidence suggests a potential for increased use of ABPM. Insufficient evidence regarding the utility of ABPM in specialty clinical practice is available. Such evidence is critical to implementing health policy changes.

A review of clinic records and ABPM data for all patients undergoing 24-hour ABPM between June 1, 1999 and May 31, 2000 (n = 43) was completed to determine the patterns of ABPM use in a major southeastern hypertension referral center. Data was collected on reasons for ABPM, in-clinic blood pressures obtained using a mercury sphygmomanometer (BPHg), ABPM over 24 hours using SpaceLabs equipment, and therapeutic outcomes from ABPM results.

Reasons for ABPM included: uncontrolled hypertension (33%), suspected secondary hypertension (23%), evaluation of suspected white coat effect (1%), and other (9%). Clinic BPHg were compared with each of Day and Total 24 Hour ABPM averages for mean arterial blood pressure (MAP) using a paired t-test. No significant differences were found between BPHg and ABPM MAP for daytime (p = 0.888) or Total 24 Hour ABPM values (p = 0.877). Day, Night, and Total 24 Hour ABPM MAP measurements were also compared. Significant differences were found between Day and Night ABPM MAP readings (p = 0.0001) and Day and Total 24-hour values (p < 0.001). ABPM results provided clinical evidence of blood pressure control (mean BP < 135/85) for 42% while clinic readings indicated only 23% with adequately controlled BPs (mean BP < 140/90). ABPM results indicated 49% did not have adequate BP control (mean BP > 135/85) whereas 67% were inadequately controlled from clinic readings (mean BP > 140/90). These comparisons provided information for therapeutic intervention including medication change (44%), maintaining current regimen (35%) or other (21%).

ABPM offers additional information for optimal management in selected hypertensive patients. This preliminary data supports the need for health policy change to support reimbursement for ABPM in appropriate populations.

Key Words: Ambulatory Blood Pressure Monitoring, Hypertension, Health Policy

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VALUE OF HOME BLOOD PRESSURE AS PREDICTOR OF TARGET ORGAN DAMAGE IN MILD ARTERIAL HYPERTENSION


Home blood pressure measurement has gained increasing importance for the management of hypertensive patients. The aim of our study was to compare levels of clinic (CBP), ambulatory (ABP) and home blood pressure (HBP) measurements, and their relationships with various indexes of target organ damage in I-II grade essential hypertension.

Thirty-eight essential hypertensives underwent evaluation of clinic, ambulatory and home blood pressures. Each patient recorded HBP for two days with a digital BP monitor three times daily, the first time on the same day during which was simultaneously performed ABP monitoring. Moreover, in all subjects electrocardiogram recording, echocardiographic study, microalbuminuria assay and fundus oculi examination were obtained.

The average of HBP obtained on the first day (142.7/92.7 ± 14.4/9.8), especially systolic values, were quite similar to mean daytime ambulatory BP (142.4/93.5 ± 13.3/9.8) recorded on the same day. Clinic, both systolic and diastolic BP, showed no significant correlation with left ventricular mass index (LVMI) and with albumin excretion rate (AER), whereas a correlation barely significant was observed with an index of global target organ damage (GTODi) including cardiac, renal and retinal parameters (for systolic BP: r = 0.41; for diastolic BP: r = 0.38, both p < 0.02). On the contrary, home blood pressures, especially those recorded on the second day, correlated significantly, and more tightly than clinic BP, with LVMI (for systolic BP: r = 0.45 – p < 0.005; for diastolic BP: r = 0.38– p < 0.01), AER (for systolic BP: r = 0.40 – p < 0.01; for diastolic BP: r = 0.31 – p = 0.05), and GTODi (for systolic BP: r = 0.60 – p < 0.001; for diastolic BP: r = 0.57– p < 0.001).

Our study seems to justify the adoption of home BP monitoring in the management of hypertensive patients, as a useful alternative to clinical readings, and may provide additional prognostic information.

Key Words: home blood pressure, target organ damage

P-62
RELATIONSHIPS OF “AMBULATORY” WHITE COAT EFFECT WITH TARGET ORGAN DAMAGE IN ARTERIAL HYPERTENSION


Controversy remains on whether white coat effect (WCE) is a benign clinical phenomenon or carries an increased risk of target organ damage (TOD). Recently Owens et al (1) proposed to use the difference between the first measurement of ambulatory blood pressure (ABP) and the mean daytime pressure as a surrogate measure of WCE (“ambulatory” WCE).

In order to analyze the relationship between ambulatory white-coat effect and TOD, 130 essential hypertensives underwent noninvasive 24-h ABP monitoring, electrocardiogram, 2D-guided M-mode echocardiography, fundus oculi examination and microalbuminuria (AER) assay.

The study population was separated in two groups according to the median of the WCE, both for systolic and diastolic values. Because mean daytime pressure was lower in the subsets with higher WCE, the comparison between groups was made by ANCOVA adjusting for this variable.

While no difference was found between the subsets with high and low WCE with respect to AER and prevalence of hypertensive retinopathy, left ventricular mass index (LVMI) (125 ± 3.2 vs 116 ± 3.2 g/m2) and relative wall thickness (RWT) (0.40 ± 0.01 vs 0.37 ± 0.01) were greater (p < 0.05) in the group with high systolic WCE. The significant asso-
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**EVOLUTION OF BLOOD PRESSURE CONTROL IN SELECTED HYPERTENSIVES FOLLOWED IN A HYPERTENSION OUTPATIENT CLINIC**  
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**Aim of the study**  
The aim of this study was to investigate the evolution of clinical blood pressure (BP) control in a large cohort of hypertensives patients, regularly treated and followed in a hypertension outpatient clinic, comparing the prevalence of BP control in a group of hypertensives, visited during 2000, with that observed in a group with similar characteristics, studied during 1998 (J Hypertens 1999).

**Population and methods**  
902 consecutive hypertensives (469 men, 433 women, mean age 59±12 years), attending our hypertension outpatient clinic, during the year 2000, and followed up the same medical team for at least six months, were included in the study (group I); the 700 patients visited in 1998 (385 men; 315 women; mean age 59±11 years) constituted the group II.

**Results**  
Clinical BP values, in treated patients, resulted: 138±14/84±8 mmHg in group I and 142±16/87±9 mmHg in group II (p<0.01) with a lower percentage of monotherapy in group I (30%) than group II (35%). The prevalence of BP values, divided in 3 tertiles, under treatment resulted in group I: 60% in the tertile <140/90 mmHg, 39% in that one 140/90-160/95 mmHg; while in group II it resulted 50%, 28% and 22% respectively. A satisfactory BP control (BP<140/90 mmHg) was observed in 44% of hypertensives of group I, versus 36% of group II (p<0.01); however, a low prevalence of optimal BP control (BP<130/85 mmHg) was documented in each group (17 vs 16%). Finally, considering independently systolic and diastolic BP values, the percentage of patients, in both groups with satisfactory diastolic BP control was higher than the percentage of individuals with adequate systolic BP levels (65% vs 51%, p<0.01 and 53% vs 40%, p<0.01, respectively).

**Conclusion**  
This study demonstrates that: 1) prevalence of effective BP control in treated hypertensives, attending specialist clinic, seems to improve significantly during the time; 2) systolic BP control results more difficult to reach than diastolic BP control; 3) prevalence of optimal BP values, under treatment, is still very low.

Key Words: Blood pressure control

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**NOCTURNAL FALL AND “SIESTA” REDUCTION IN SYSTOLIC BLOOD PRESSURE: SIMILARITIES AND DIFFERENCES AGE & GENDER-RELATED**  
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Prognostic value of blunted BP night-time reduction might be useful in hypertensive evaluation. In the present study we evaluated pattern and profiles of 24-h ambulatory systolic BP recording, with regard to similarities and differences during afternoon (“siesta”) and night-time periods in six groups of subjects: group I, from 35 to 40 years (104 males - 72 females); group II (110 M - 102 F) 41 to 45 years, group III (151 M-125 F) 46 to 50 years, group IV (86 M-106 F) 61 to 65 years, group V (53 M - 98 F) 66 to 70 years, group VI (31 M - 61 F) 71 to 75 years. All patients were uncomplicated and with no previous cardiovascular events and they carried out 24-h ambulatory BP monitoring. Nocturnal systolic BP fall into three younger group of patients was always greater compared to the afternoon in both males and females, whereas into three elderly groups nocturnal systolic BP fall was blunt and with values comparable to that observed during siesta period in both males and females.

Key Words: Serum cholesterol, Isometric exercise, Intima media thickness