

Poster Session 20 - Implementation of Guidelines & Integrated Treatment Approaches in Cardiovascular and Metabolic Disease

PS20/MON/08 - Blood pressure control with monitoring ambulatory blood pressure (AMBP), self-measured blood pressure at home (SMBP) and office blood pressure

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Objective: The purpose this study is to analyze the relationship between office blood pressure (OBP), Monitoring Ambulatory blood pressure (AMBP) and Self-measured blood pressure (SMBP) at home, and assess the degree of agreement in blood pressure control between different methods in hypertensive patients.

Methods: Cross-sectional study in which included 241 hypertensive patients with an indication for an AMBP. We determined ambulatory blood pressure through AMBP during 24 hours and SMBP during three days, compared with values of Office blood pressure. We used as good control criteria the recommendations of European hypertension 2007 Guideline from ESH-ESC.

Results: 53.1% are women and mean age was 63.71 years. The highest measurement blood pressure was Office BP on first time 155.87/87.56 mmHg. The first measurement in office was higher than second: 5.18 (95%CI:3.78-6.58)mmHg in Systolic Blood Pressure and 1.30 (95%CI:0.57-2.03) mmHg in diastolic ($p < 0.05$). SMBP was lower than Office and the first measurement was higher than second too: 6.15 (95%CI:5.34-6.91)mmHg SBP and 1.75 (95%CI:1.31- 2.18) mmHg in diastolic ($p < 0.05$). AMBP was the lowest measures and at rest the lowest between them: 115.48/65.59 mmHg.

We found Office blood pressure $< 140/90$ mmHg in 18% with first measurement and 27% second. Home blood pressure $< 135/85$ in 40% with first measurement and 27% second and blood pressure with AMBP $24 < 130/80$ the 61%, activity BP $< 135/85$ the 61% and rest BP $< 120/75$ the 56%. The agreement with Kappa Index was 0.5 or less. Finally, 26% of patients had normal blood pressure with AMBP 24h and high office blood pressure (HTA "white coat" or false resistance). By contrast, 6% had normal office blood pressure and high BP with AMBP 24h (HTA masked).

Conclusions: Systolic and diastolic office blood pressure were the highest, followed of SMBP and AMBP. Concordance index between different methods were low. Office blood pressure control was lower than SMBP and AMBP control.