Supplementary material

Wojciechowska E, Cienszkowska K, Ludwiczak M, et al. Uncontrolled blood pressure according to ambulatory blood pressure monitoring values in pregnant women is poorly predictable. Kardiol Pol. 2023.

METHODS

Subjects with the diagnosis of secondary hypertension and gestational age < 4 weeks or any chronic disease demanding pharmacotherapy, including diabetes mellitus, autoimmune disease, or chronic kidney disease were excluded from the participation in the study. At each office visit OBPM were taken using automatic oscillometric devices (Omron HEM-7120-E). Measurements were performed in accordance with the current guidelines [1]. HBPM were taken by participants for a week before each office visit using oscillometric devices. Measurements were performed twice a day, in the morning and evening after. Earlier all subjects were instructed how perform HBPM properly. The day before each office visit all women underwent 24h ABPM using SpaceLabs 20701 device with measurements scheduled at 15 min intervals during daytime (06:00-22:00h) and 30 min during night-time (22:00-06:00h). Women were advised to continue with normal daily activities. The test was considered correct when at least 20 measurements during the day and 8 at night were recorded.

For OBPM SBP ≥ than 140 and/or DBP 90 mm Hg, for HBPM SBP ≥ than 135 and/or DBP 85 mm Hg and for ABPM SBP/DBP ≥ 130 and/or 80 mm Hg during 24-h or ≥ 135 and/or 85 mm Hg during activity period or ≥ 120 and/or 70 mm Hg were considered as uncontrolled BP.

The antihypertensive drugs were administered according to the following principles: first methyldopa, then labetalol, followed by nifedipine as needed. Metoprolol was used transiently in some females when labetalol was not available. The doses of antihypertensive drugs were titrated to reach and maintain mean 24-h SBP/DBP below 130/80 mmHg. In cases of significant discrepancy in BP values between ABPM and OBPM, doses were changed based on the former method. The dose of antihypertensive drug was also titrated up when the maximal OBPM or

HBPM value was higher than 160/105 mmHg. At the end of the study, 25% of the females had received one antihypertensive drug, 55% had received two drugs, and 20% had received three drugs. All subjects also received 75 mg of acetylsalicylic acid once daily.

The analysis was performed in R, environment for statistical computing version 4.1.0 (2021 The R Foundation for Statistical Computing, Vienna, Austria).

RESULTS

Table S1. Study participants characteristic.

Age [years]	34 (4.7)
Pre-pregnancy BMI [kg/m^2]	24.1 (3.2)
History of stillbirth (N, %)	10 (12.7%)
History of miscarriage (N, %)	72 (91.1%)
Pre-existing hypertension (N, %)	62 (78.5%)
History of hypertension during previous pregnancies (N, %)	17 (21.5%)

BMI – body mass index

REFERENCE

1. Williams B, Mancia G, Spiering W, et al. 2018 ESC/ESH Guidelines for the management of arterial hypertension. 2018; 39(33): 3021-3104. doi: 10.1093/eurheartj/ehy339.