Reference indices of blood pressure in pregnancy

Summary / Zusammenfassung
Objective: To generate reliable new reference ranges for pregnancy blood pressure from a large population.
Design: A prospective cross-sectional study.
Setting: Obstetric outpatient clinic, Zurich University Hospital.
Sample: Accurately dateable singleton pregnancies (Caucasian: n = 3234; Asian [predominantly from Sri Lanka, Thailand and the Philippines]: n = 577; Black n = 212).
Methods: Between January 1996 and February 2000 blood pressure was determined in 4023 pregnant women using an oscillometric automated device (DinamapTM) according to British Hypertension Society recommendations. Women receiving antihypertensive medication were excluded.
Results: Only the means of duplicate measures at the booking visit (5-42 weeks) were used in the analysis. Mean blood pressure decreased from early to mid pregnancy before increasing to levels 4 mmHg higher at term than in early pregnancy. Values > 130/80 and < 90/50 mmHg were above the 95th and below the 5th centiles, respectively. Parity, age and body mass index were significant determinants in Caucasians. Blood pressure was slightly lower in Asians and Blacks.
Conclusions: The current World Health Organization definition of high diastolic blood pressure (>= 90 mmHg on two occasions) reflects values > 2 standard deviations from the mean. This may be too conservative as threshold for detecting women at risk of preeclampsia. Further studies are required to determine the prognostic implications of gestational values >= 95th centile (>=130/80 mmHg) and <= 5th centile (<=90/50 mmHg).

Publications / Publikationen

Keywords / Suchbegriffe
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