

Validation and Compliance of a Home Monitoring Device in Pregnancy: Microlife WatchBP Home

Yealin Chung, Annemarie de Greeff, and Andrew Shennan

Maternal & Fetal Research Unit, King's College London, London, UK

Objective. To assess the accuracy and patient compliance in using a novel home blood pressure monitoring device in high-risk pregnancy. *Methods.* Device accuracy was assessed according to the British Hypertension Society protocol in 45 pregnant women, including 15 with preeclampsia. Twenty-one high-risk pregnant women used the device in addition to their antenatal care. *Results.* The device achieved a mean difference \pm SD of $0.4 \pm 7.3/-0.4 \pm 5.5$ mmHg (pregnancy) and $-2.6 \pm 7.0/0.8 \pm 4.4$ mmHg (preeclampsia) for systolic/diastolic pressure. Eighty-one percent of women did at least 6 measurements/day and all women did at least 2 measurements/week. *Conclusion.* The Microlife WatchBP Home is accurate for use in pregnancy and increases surveillance in compliant patients.

Keywords Blood pressure, Home monitoring, Preeclampsia, Pregnancy, Validation.