



Schweizerische Hypertonie-Gesellschaft  
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### **Hot from the hypertensive press**

*Short analysis of clinical studies that may change our practices in the field of hypertension*  
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#### **No more CHIPS after CHAP?**

Blood pressure (BP) thresholds for treatment and target during pregnancy have been debated since 2015, when the Control of Hypertension in Pregnancy Study (CHIPS)(1) concluded that women with gestational hypertension with office diastolic blood pressure (DBP) of 90 to 105 mmHg, who were assigned to tight BP control (DBP < 85 mm Hg), had no significant difference in the risk of pregnancy loss, high-level neonatal care, or overall maternal complications. They had lower frequency of severe maternal hypertension.

Recently, the open-label multicentre randomised trial (Chronic Hypertension and Pregnancy: CHAP) reassessed the benefits and safety of mild hypertension *treatment* (<140/90 mmHg). (2)

More than 2400 women with a new or known diagnosis of chronic hypertension at a gestational age of less than 23 weeks were randomized to receive antihypertensive treatment recommended during pregnancy to reach BP target < 140/90 mm Hg or no treatment if BP was less than 160/105 mm Hg. The primary outcome (composite of preeclampsia with severe features, medically indicated preterm birth at less than 35 weeks' gestation, placental abruption, or foetal or neonatal death) was lower in active group (adjusted risk ratio of 0.82 (95% confidence interval [CI], 0.74 to 0.92; P<0.001)). There were no difference in serious maternal complication or the incidence of severe neonatal complications. In addition, the incidence of preeclampsia and preterm birth was lower in the active group. This landmark study is important since pregnancy outcomes were better with a strategy targeting a BP of < 140/90 mmHg with no increase in small for gestational age birthweight. However, a large number of women were excluded in the pre-randomisation period, mostly because BP at enrolment was too low or gestational age was above 23 weeks. Secondly, the lower threshold of BP were not determined by this study.

Prof Dr Gregoire Wuerzner, on behalf of the SSH

1. Magee LA, von Dadelszen P, Rey E, Ross S, Asztalos E, Murphy KE, et al. Less-tight versus tight control of hypertension in pregnancy. *N Engl J Med.* 2015;372(5):407-17.
2. Tita AT, Szychowski JM, Boggess K, Dugoff L, Sibai B, Lawrence K, et al. Treatment for Mild Chronic Hypertension during Pregnancy. *New England Journal of Medicine.* 2022.

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