SOCIETY STATEMENT

Outline of Definition and Classification of “Pregnancy induced Hypertension (PIH)”

Kazushi Watanabe¹, Katsuhiko Naruse², Kanji Tanaka³, Hirohito Metoki⁴, Yoshikatsu Suzuki⁵

¹Department of Obstetrics and Gynecology, Aichi Medical University School of Medicine, ²Department of Obstetrics and Gynecology, Nara Medical University, ³Department of Obstetrics and Gynecology, Hirosaki University, ⁴Department of Obstetrics and Gynecology and Tohoku Medical Megabank Organization, Tohoku University, ⁵Department of Obstetrics and Gynecology, Nagoya City West Medical Center

In this report, we present the terminology, definition and classification of pregnancy induced hypertension (PIH) by the Japan Society for the Study of Hypertension in Pregnancy (JSSHP). PIH is classified as gestational hypertension (GH), preeclampsia (PE), superimposed preeclampsia (S-PE) or eclampsia (E). Subclassifications by symptoms (severity and gestational age at onset) are also shown.

Terminology

In 2004, “Toxemia of Pregnancy” was revised to “Pregnancy induced Hypertension (PIH)” in Japan.¹,²

Definition

PIH is defined as hypertension (blood pressure ≥ 140/90 mmHg) with or without proteinuria (≥ 300 mg/24 hours) emerging after 20 weeks gestation, but resolving up to 12 weeks postpartum.¹–10) PIH is also defined as new onset proteinuria (≥ 300 mg/24 hours) in hypertensive women who exhibit no proteinuria before 20 weeks gestation.

Classification

Gestational hypertension (GH)
GH is diagnosed in women whose blood pressure reaches ≥140/90 mmHg for the first time during pregnancy (after 20 weeks gestation), but without proteinuria. Blood pressure normalizes by 12 weeks postpartum.

Preeclampsia (PE)
Hypertension (blood pressure ≥140/90 mmHg) accompanied with proteinuria exceeding 300 mg/24 hours emerges for the first time after 20 weeks gestation, but both symptoms normalize by 12 weeks postpartum.

Superimposed preeclampsia (S-PE)
Superimposed preeclampsia is diagnosed in the following three cases. (1) New onset proteinuria (≥300 mg/24 hours) in hypertensive women who exhibit no proteinuria before 20 weeks gestation. (2) Hypertension and proteinuria documented antecedent to pregnancy and/or detected before 20 weeks gestation, one or both of which progressing after 20 weeks gestation. (3) Renal disease with proteinuria documented antecedent to pregnancy and/or detected before 20 weeks gestation, which is accompanied with new onset hypertension after 20 weeks gestation.

Eclampsia (E)
Eclampsia is defined as the onset of convulsions in a woman with PIH that cannot be attributed to other causes. The seizures are generalized and may appear before, during, or after labor.

Subclassification by symptoms

*Severity*
The severity of PIH is assessed by the extent of symptoms. Both blood pressure and proteinuria are dependable indicators of severity.
**Mild PIH**
Blood pressure is $\geq 140/90$ mmHg but $< 160/110$ mmHg after 20 weeks gestation, and proteinuria is $\geq 300$ mg/24 hours without exceeding 2.0 g/24 hours or 3+ dipstick.$^{3,4,10,11}$

**Severe PIH**
Blood pressure is $\geq 160/110$ mmHg, and proteinuria exceeds 2.0 g/24 hours or 3+ dipstick.$^{11,12}$

*Classification by onset*
PIH that emerges earlier than 32 weeks gestation is referred to as early onset (EO) type, and PIH that emerges after 32 weeks gestation is referred to as late onset (LO) type.$^{13–15}$

**Appendix**
- Pulmonary edema, stroke, and HELLP syndrome are considered severe variants, and are excluded from the definition or classification of PIH.
- Gestational proteinuria and edema are excluded from PIH symptoms.

**References**