

Postpartum hypertension

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1 Blood pressure should be measured three to six days after delivery¹

Blood pressure normally peaks three to six days postpartum in both normotensive women and those with previous hypertension.^{1,2} Pain, drugs (e.g., nonsteroidal anti-inflammatory drugs [NSAIDs]), excess fluid administration or restoration of vascular tone to prepregnancy level may increase blood pressure.^{2,3} Women with pre-existing hypertension or preeclampsia should be monitored carefully postpartum, and NSAIDs should be avoided for pain control.^{1,4}

2 Onset of preeclampsia can be postpartum

About 5.7% of cases of preeclampsia or eclampsia may present de novo in the postpartum period (up to six weeks), even without hypertension in pregnancy.⁵ These women often present with new-onset persistent headaches or visual changes.³ A high clinical index of suspicion is crucial (e.g., check blood pressure, perform urinalysis and consult obstetrics). Women with preeclampsia or eclampsia should be referred immediately to hospital for treatment with magnesium sulfate (usually intravenously), antihypertensive therapy and monitoring.¹

3 Treatment is recommended if high blood pressure is present persistently (systolic > 140 and/or diastolic > 90)¹

A woman with postpartum hypertension who is asymptomatic with a blood pressure of less than 160/110 mm Hg can be treated as an outpatient with drugs taken orally (Box 1).¹ All women with postpartum hypertension should be examined for HELLP (hemolysis, elevated liver enzymes, low platelets) syndrome and other end-organ effects by using tests for total blood count, levels of creatinine and liver enzymes, and urinalysis. Drug dosage can be titrated down once blood pressure is less than 140/90 mm Hg for at least 48 hours.³ (This recommendation is specific to the postpartum period and differs from the Canadian Hypertension Education Program guideline for treating hypertension.)

4 Postpartum hypertension may persist for several weeks

Gestational hypertension and preeclampsia (two common causes of persisting postpartum hypertension) usually resolve by 12 weeks.^{2,4} Beyond this period, clinicians should consider a secondary cause of hypertension, which can be found in up to 10% of cases,² before establishing a diagnosis of essential chronic hypertension. Initial investigations include serum creatinine, electrolytes and urinalysis.¹ Further investigations may be considered based on clinical features.

5 Postpartum hypertension can be treated safely during breastfeeding

Although there are limited studies assessing neonatal effects of maternal antihypertensive treatment during breastfeeding, well-established understanding of pharmacokinetic principles has led to the acceptance of multiple antihypertensive drugs as safe for use (Box 1).⁴ Diuretics and angiotensin II receptor blockers are not recommended.^{2,4}

Box 1: Treatment of postpartum hypertension less than 160/110 mm Hg*

| Drug† | Usual dosage | Maximum dosage |
|---------------|-------------------|----------------|
| Nifedipine XL | 20–30 mg daily | 60 mg b.i.d. |
| Labetalol | 100–200 mg b.i.d. | 300 mg q.i.d. |
| Methyldopa | 250–500 mg b.i.d. | 500 mg q.i.d. |
| Enalapril | 5–10 mg b.i.d. | 10 mg b.i.d. |

Note: b.i.d. = twice a day, q.i.d. = four times a day.

*Adapted from Magee and colleagues,¹ and Podymow and August.⁴

†All listed drugs are considered safe for breastfeeding.

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