

Hypertension Emergency

SBP \geq 160 mm Hg or DBP \geq 110 mm Hg
Fetal monitoring required

Decrease BP to a level that lowers risk for stroke & does not impair cerebral circulation & continuously monitor fetal condition⁵

Magnesium sulfate seizure prophylaxis

4 to 6 g IV load over 20 minutes then 1-2 g per hour continuous infusion for 24 hours
10 g IM injection (5 g into each buttocks + 1 cc 1% lidocaine) then 5 g every 4 hours (if no IV)

Oral nifedipine, 10 mg
Or oral labetalol, 200 mg
If IV Rx
Not available^{1,2,3}

First Line Agents³

IV Labetalol

IV Hydralazine

Oral Nifedipine

Use with caution when⁴

Labetalol

Heart rate $<$ 60 bpm,
Congestive heart failure,
AV heart block, or asthma

Hydralazine

Heart rate $>$ 100 bpm,
Recent stroke,
Severe mitral valve disease

Nifedipine

Heart rate $>$ 100 bpm, Severe
aortic stenosis, Recent MI,
cardiogenic shock

Preferred agent when⁴

Labetalol

Maternal tachycardia

Hydralazine

Maternal bradycardia

Nifedipine

Maternal bradycardia or oliguria

Check blood pressure every 20 minutes (10 minutes if labetalol)

Continue if SBP \geq 160 mm Hg or DBP \geq 110 mm Hg

Labetalol (q 10 min)³

Initial:

20 mg IV over 2 minutes

Second:

40 mg IV over 2 minutes

Third:

80 mg IV over 2 minutes

**If BP remains elevated,
then switch to**

**Hydralazine starting
at 10 mg IV push**

Hydralazine (q 20 min)³

Initial:

5 to 10 mg IV over 2
minutes

Second:

10 mg IV over 2 minutes

**If BP remains elevated,
then switch to**

Labetalol 20 mg IV push

**If needed,
Labetalol 40 mg IV push**

Nifedipine (q 20 min)³

Initial:

10 mg by oral route

Second:

20 mg by oral route

Third:

20 mg by oral route

**If BP remains elevated,
then switch to**

**Labetalol starting at 40
mg IV push**

Second line agent, Intravenous nicardipine³

2.5 to 5 mg per hour and titrate to effect, maximum 15 mg per hour

References

1. Shekhar S, Sharma C, Thakur S, Verma S. Oral Nifedipine or Intravenous Labetalol for Hypertensive Emergency in Pregnancy: A Randomized Controlled Trial. *Obstet Gynecol* 2013;122:1057-63
2. ACOG District II Safe Mother Initiative. Maternal Safety Bundle for Severe Hypertension in Pregnancy
3. ACOG Committee Opinion No. 623. Emergent Therapy for Acute-Onset, Severe Hypertension During Pregnancy and the Postpartum Period. February 2015
4. Vadhera R, Simon M. Hypertensive Emergencies in Pregnancy. *Clinical Obstetrics and Gynecology* Volume 57, Number 4, 797 - 805 © 2014, Lippincott Williams & Wilkins
5. Barton, John R. Hypertension in Pregnancy. *Ann Emergency Med*, 2008;51:S16-17