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# THE BIRTH PLACE

## Administration of IV Labetalol, IV Hydralazine and Oral Nifedipine for Severe Hypertension in Pregnancy or Postpartum on the Birth Place

Severe hypertension in pregnancy or postpartum (<6 weeks postpartum) is defined as two consecutive blood pressure measurements of at least 15 minutes apart that ≥160 mmHg systolic or ≥110 mmHg diastolic

### **POLICY:**

The P & T Committee and the Medical Staff Executive Committee have approved the use of IV Labetalol, IV Hydralazine and oral Nifedipine for severe hypertension in pregnancy and postpartum on the Birth Place upon physician's order. Continuous cardiac monitoring is not necessary routinely, however should be used in patients with relevant co-morbidities (eg, coronary artery disease). IV Labetalol may be given IV push but not as an IV infusion on the Birth Place.

### **PROCEDURE:**

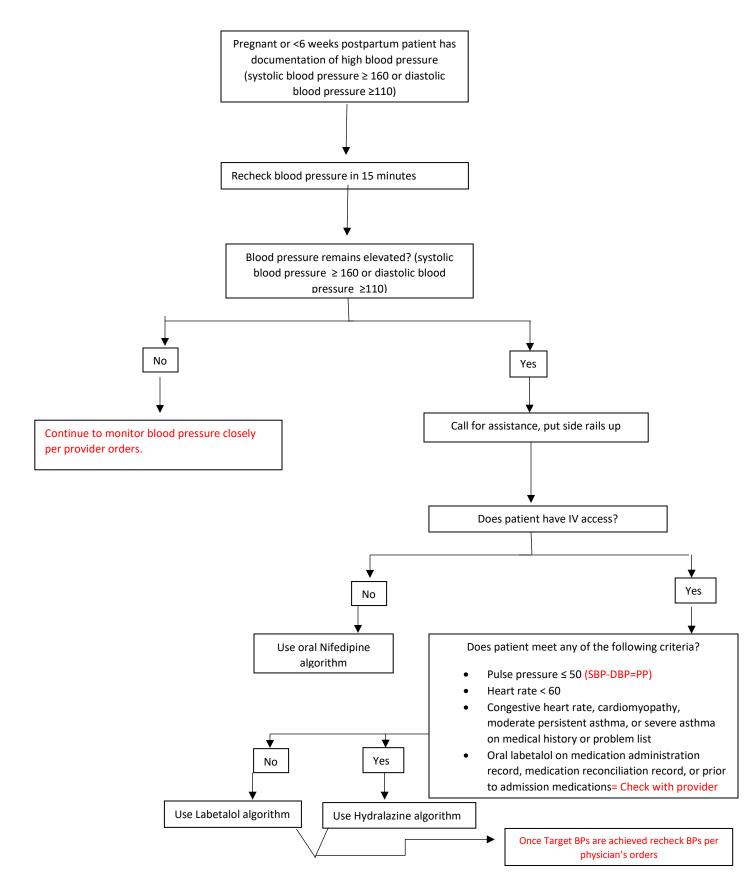
Upon receiving order to initiate a first line option for emergency treatment of acute, severe hypertension in pregnancy or postpartum, the Birth Place RN will:

- Obtain medication from Automatic Dispensing Cabinet (ADC) or Pharmacy.
- Verify IV patency.
- Monitor blood pressure per chart below.
- Ensure medication is documented in the EMR.

#### **Target Blood pressures:**

- Systolic130-159 mmHg
- Diastolic 80-109 mmHg
- · May need to be individualized based on maternal and fetal factors

## **Treatment Algorithm**



	Labetalol Hydrochloride (Normodyne or Trandate) Recommended for first-line therapy	Hydralazine Hydrochloride (Apresoline) Hypotensive response is less predictable than with IV labetalol	Nifedipine (Procardia) Immediate-release rapid acting is used when no IV access is available
Initial Dose	20 mg IV over 2 minutes	5mg IV over 2 minutes	10 mg PO immediate- release rapid-acting capsule
BP Measurements	Repeat BP measurement at 10-minute intervals:•If BP remains above target level at 10 minutes, give 40 mg IV over 2 minutes * Call provider if 2 doses are needed to obtain target BP•If BP remains above target level at 20 minutes, give 80 mg IV over 2 minutes•If BP remains above target level at 20 minutes, give 80 mg IV over 2 minutes•If BP remains above target level at 30 minutes, give 80 mg IV over 2 minutes•If BP remains above target level at 30 minutes, give 80 mg IV over 2 minutes•If BP remains above target level at 30 minutes, give 80 mg IV over 2 minutes•If BP remains above target level at 40 minutes, give 80 mg IV over 2 minutes•If BP remains above target level at 40 minutes, give 80 mg IV over 2 minutes•If BP remains above target level at 40 minutes, 	Repeat BP measurement at 10 minute intervals: If BP remains above target level at 20 minutes, give 5 mg IV over 2 minutes * Call provider if 2 doses are needed to obtain target BP If BP remains above target level at 40 minutes, give 10 mg IV over 2 minutes, depending on the previous response Cumulative maximum dose is 20mg. If target BP is not achieved, switch to another agent.	Repeat BP measurement at 10 minute intervals: • If BP remains above target level at 20 minutes, call provider for further instruction
Onset and Duration of Medication	Fall in BP begins within 5- 10 minutes and lasts from 3-6 hours.	Fall in BP begins within 10- 30 minutes and lasts from 2-4 hours.	Lowers BP within 30-60 minutes
Contraindications	Pulse pressure ≤50, Heart rate <60, Congestive Heart Failure, moderate persistent Asthma, or severe Asthma or > 1st degree heart block		

References:

UpToDate, Management of Hyptertension in Pregnant and Postpartum Women, Dec 18, 2017. AWHONN Perniatal Nursing, Edition 4, Kathleen Rice Simpson & Patricia A Creehan, 2014.