

Hypertensive Emergency Checklist

Recognize

If a patient has a severe range blood pressure (SBP $\geq$ 160 and/or DBP $\geq$ 110)

- ☐ Ensure blood pressure cuff appropriate size and blood pressure taken at the level of the heart with patient reclining at a 45-degree angle (NOT supine or lateral positioning)
- ☐ Repeat blood pressure in 5 minutes. If still severe range, initiate protocol below.

Respond

- ☐ Activate MEWS
- ☐ Team Huddle
- ☐ Call for assistance PRN (place IV, checklist)

Treat

- ☐ Place IV
- ☐ Send preeclampsia labs (CBC, CMP or AST/ALT and BUN/Cr, LDH, P:C ratio)
- ☐ Begin continuous fetal monitoring if viable gestational age (at least 23 0/7 weeks)
- ☐ Ensure side rails up (and padded)
- ☐ Repeat blood pressure 15 minutes after initial severe range. **If still severe, administer acute antihypertensive therapy**
- ☐ Follow antihypertensive therapy algorithm **on back of page**
- ☐ Consider initiation of Magnesium Sulfate 4-6 g bolus over 20-30 minutes then Magnesium sulfate 2g/hr maintenance therapy
- ☐ Consider initiation or uptitration of long acting antihypertensive

Monitor Blood Pressure

Even if blood pressures no longer severe range:

- ☐ Repeat every 15 minutes for 1 hour then
- ☐ Every 30 minutes for one hour then
- ☐ Every 1 hour for 4 hours
- ☐ Reactivate MEWS as necessary

Other considerations:

- ☐ Consider need for ICU consultation for refractory severe range blood pressures (may need Nicardipine gtt, which requires ICU admission and cardiac monitoring)
- ☐ Head imaging if unrelenting headache or neurological symptoms (CT or MRI)
- ☐ Give Antenatal Corticosteroids (if indicated)

Debrief

- ☐ Debrief with patient and family
- ☐ Debrief with Obstetric team

Document

- ☐ Physicians: use "MEWS" smart note. Fill out all fields, including medication given
- ☐ Nursing: use the "MEWS" flowsheet in the electronic medical record (EMR). Fill out all fields, including final disposition.

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Medication protocols:

Immediate Release (IR) Nifedipine Protocol*

(Consider as initial agent due to ease of access and administration on any unit)

- ☐ Administer 10 mg PO IR Nifedipine
- ☐ Repeat BP in 20 minutes and record result
- ☐ If either BP is still severe-range, administer 20 mg PO IR Nifedipine
- ☐ Repeat BP measurement in 20 minutes and record result
- ☐ If either BP is still severe-range, administer 20 mg PO IR Nifedipine
- ☐ Repeat BP measurement in 20 minutes and record result
- ☐ If either BP is still severe-range, proceed with Labetalol or Hydralazine administration.

*Nifedipine has been associated with overshoot hypotension and tachycardia. (Do NOT administer sublingually, crush or chew)

*When used with magnesium sulfate, monitor maternal vital signs with specific attention to heart rate

***Nifedipine should be avoided in women with heart rate > 100 bpm and used with caution in women with heart failure**

IV Labetalol Protocol*

- ☐ Administer 20 mg IV Labetalol pushed over 2 minutes
- ☐ Repeat BP in 10 minutes and record result
- ☐ If either BP is still severe-range, administer 40 mg IV Labetalol pushed over 2 minutes
- ☐ Repeat BP in 10 minutes and record result
- ☐ If either BP is still severe-range, administer 80 mg IV Labetalol pushed over 2 minutes
- ☐ Repeat BP in 10 minutes and record result
- ☐ If either BP is still severe-range, proceed with Hydralazine administration (if not yet given).

*Labetalol should be used with caution in women with severe asthma (history of intubation, weekly symptoms, regular inhaler use or steroid use during pregnancy), and **avoided in women with a heart rate of < 70 bpm and/or heart failure**

***Maximum IV Labetalol dose: 300 mg in 24 hours**

IV Hydralazine Protocol*

- ☐ Administer 5-10 mg IV Hydralazine pushed over 2 minutes
- ☐ Repeat BP in 20 minutes and record result
- ☐ If either BP is still severe-range, administer 10 mg IV Hydralazine pushed over 2 minutes
- ☐ Repeat BP in 20 minutes and record results
- ☐ If either BP is still severe-range, proceed with Labetalol administration (if not yet given).

*Parenteral Hydralazine can increase the risk of overshoot hypotension and tachycardia

***Maximum IV Hydralazine dose: 25mg in 24 hours**

Antihypertensive Approach: Drugs and Thresholds for Treatment

- Severe hypertension should be treated expeditiously with antihypertensive agents to prevent congestive heart failure, myocardial ischemia, renal injury or failure, and ischemic or hemorrhagic stroke.
- **The TexasAIM and PFW goal is to initiate treatment for acute-onset severe hypertension as soon as reasonably possible, and no later than 60 minutes from the first severe-range BP.**

However, it is recommended to administer antihypertensive therapy as soon as reasonably possible after the criteria for acute-onset severe hypertension are met.

References:

Chronic Hypertension in Pregnancy, ACOG Practice Bulletin #203, January 2019; Gestational Hypertension and Preeclampsia, ACOG Practice Bulletin #222, June 2020.