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STABILIZATION OF AN ECLAMPTIC OR PREECLAMPTIC PATIENT IN THE EMERGENCY DEPARTMENT PROTOCOL	3805-023P	Page 1 of 4
Author	**DEPARTMENT:**	Effective Date
EMERGENCY DEPARTMENT LEADERSHIP	**EMERGENCY DEPARTMENT**	07/01/2020

Background:
Preeclampsia and eclampsia are leading causes of maternal morbidity and mortality among prenatal, intrapartum and postpartum patient populations, with the risk of developing present up to 6 weeks after delivery. Early identification and intervention utilizing standardized, evidence-based guidelines and protocols can reduce the incidence of adverse maternal outcomes.

Purpose:
To provide guidance for providers and support staff in the identification and management of preeclampsia and eclampsia among patients presenting to the Emergency Department. This includes the simultaneous management of: 1) Notification of L&D, 2) Fetal Monitoring and Assessment, 3) Blood pressure control, 4) Magnesium therapy, and 5) Obtaining pertinent labs

Departments Affected:
Emergency Department; Labor and Delivery

Protocol:

Definitions:

- **Eclampsia**- the convulsive manifestation of the hypertensive disorders of pregnancy and is identified by new-onset, tonic-clonic, focal, or multifocal seizures
- **Preeclampsia (with severe features)-** the new onset of hypertension and signs of end-organ dysfunction after 20 weeks gestation and up to 6 weeks postpartum:
  - Hypertension
    - SBP ≥ 160 mmHg or DBP ≥ 110 mmHg (at any time) OR
    - SBP ≥ 140 mmHg or DBP ≥ 90 mmHg (x2 at least 4 hours apart)

PLUS

  - End-organ dysfunction (any of the following)
    - Platelet < 100,000 µL
    - SCr > 1.1 mg/dL
    - LFT > 2x ULN
    - Pulmonary edema
    - New onset or persistent headache
    - Visual symptoms/changes

Guidelines:

1. **Eclampsia**: any pregnant woman over 20 weeks gestation presenting with new onset seizures should be managed as eclampsia until proven otherwise. Immediate interventions include notification of the OB/Gyn service line at 502-562-3094 (L&D) and the initiation of the following protocol (outlined below) and transfer to L&D unit.

2. **Preeclampsia (with severe features)**: any pregnant woman over 20 weeks gestation presenting with new onset hypertension and signs of end-organ dysfunction (see definitions) should be managed as preeclampsia until proven otherwise. Immediate notification of the OB/Gyn service line at 502-562-3094 (L&D) for direction of management and likely initiation of the following protocol (outlined below).

3. [A] Fetal Monitoring- To be initiated by L&D services upon immediate notification

4. [B] Breathing and standard airway precautions– Oxygen by face mask (if not intubated) at (4) four LPM; left lateral position both helps prevent aspiration and improves fetal oxygenation.

5. [C] Circulation – Establish IV access and obtain labs (if not previously obtained).
   With IV access, draw blood and send for:
   - CBC w/ Diff
   - Type and Screen
   - PT/INR/PTT/fibrinogen
   - Complete metabolic panel (CMP)
   - Serum and Urine Toxicology screen
   - Accucheck/POC blood glucose while awaiting labs
   - LDH
   - Urine protein Creatinine Ratio Random (per urine catheter)

6. Treatment/Prevention of seizures with Magnesium sulfate.
   DO NOT WAIT on labs to result to start Magnesium infusion
   a. IV Protocol
      i. Premix (20 gram/500mL)- obtained from Room 9 Omnicell ADC.
      ii. Loading dose: 6 grams (150mL) given over 15 minutes
         1. Infusion pump setting (600 ml/hour)
      iii. Maintenance dose
         1. Decrease infusion to 2gm/hour (50 mL/hr)
         2. If SCr >1.1 mg/dL, decrease infusion to 1gm/hr (25 mL/hr)

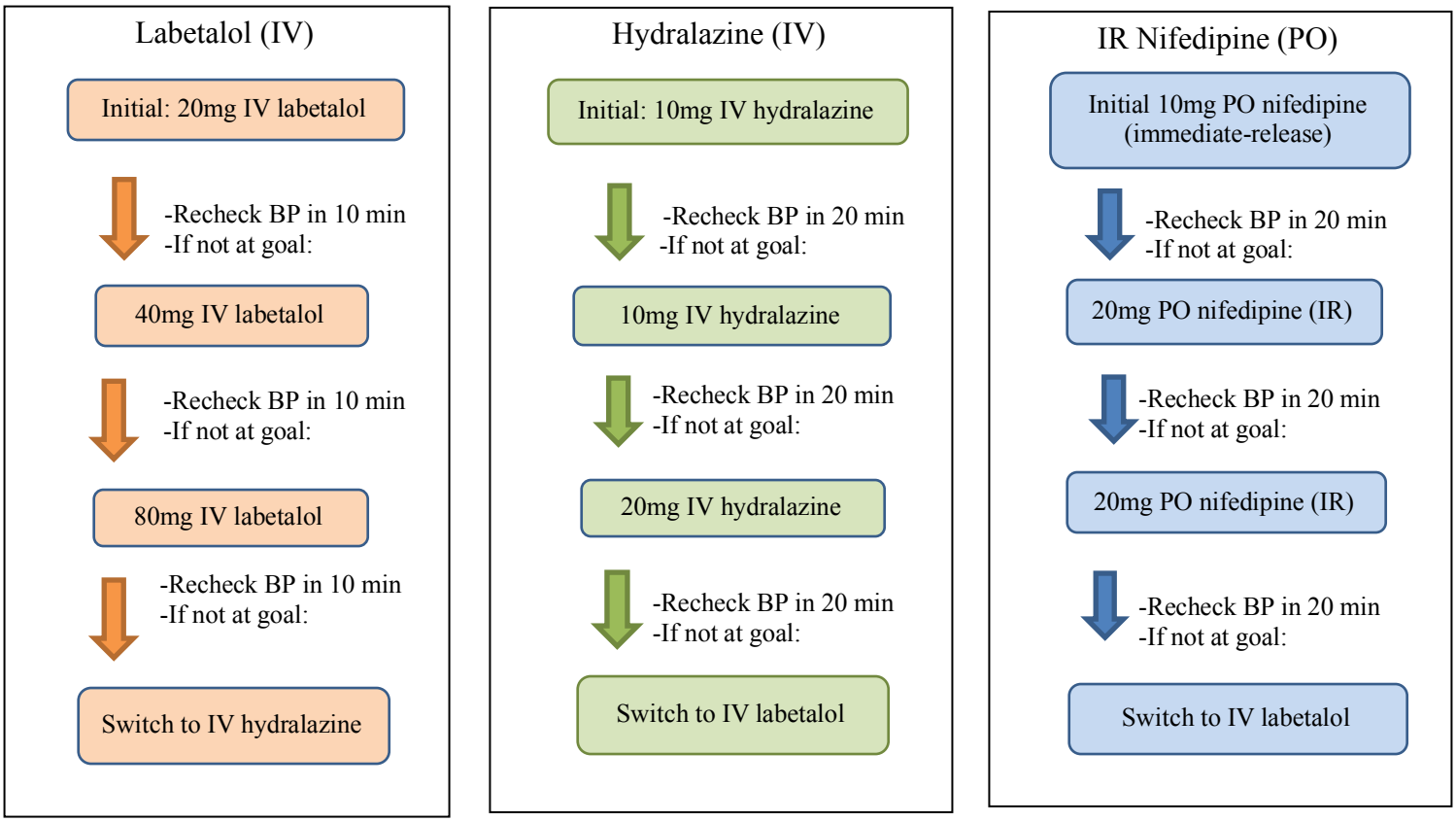
   b. If convulsions recur more than 15 minutes after loading dose, administer another 2-4gm IV dose over 5 minutes

c. During maintenance phase stop administration of Magnesium Sulfate if:
   i. Respiratory rate is less than 16 per minute.
   ii. Patellar reflexes are absent.

d. The antidote for Magnesium overdose is:
   i. Calcium gluconate 1 (one) gram (10ml of 10% Solution) slow IV.
   ii. Most important; intubate and assist her ventilation.

7. Intramuscular Magnesium sulfate
   a. If IV access is unable to be obtained, may administer IM magnesium
      i. 10gm IM (given as 5gm dose in each buttocks)
      ii. May mix each injection with 1mL 2% lidocaine

8. Treat Hypertension
   a. Initiate treatment for any SBP ≥ 160 mmHg or DBP ≥ 110 mmHg
   b. Goal SBP (140-160 mmHg) and DBP (90-100 mmHg)
   c. First line options for treatment include hydralazine or labetalol (IV) or immediate-release nifedipine (PO).



d. For patients unable to achieve BP control with first line agents, IV nicardipine may be initiated.
    i. Nicardipine continuous infusion: (5-15mg/hr) titrated to goal BP

References:

American College of Obstetricians and Gynecologists. ACOG Committee Opinion. Emergent Therapy for Acute-Onset, Severe Hypertension During Pregnancy and the Postpartum Period. Vol 133 (2). February 2019.

California Department of Public Health. California Maternal Quality Care Collaborative. Emergency Department Recognition and Treatment: Focus on Delayed Postpartum Preeclampsia and Eclampsia. May 2014.