

Saving Mothers with Hypertensive Disorders in Pregnancy:

Meeting the Challenges of Delays with Education to Reduce Care Variation



Approximately **30,000** deaths annually are attributed to hypertensive disorders.^{1,2}



HOWEVER up to **60%** of hypertension-related maternal deaths are potentially preventable.³

Common Factors Include:

- Delay in patients seeking treatment
- Delay in diagnosis
- Delay in treatment

Advanced, personalized learning is key to reducing variation in care among nurses and doctors to save more mothers' and babies' lives.



EFFECTIVE EDUCATION

- Provide preeclampsia education to all obstetrical patients, while identifying patients at increased risk for preeclampsia
- Provide additional education to patients with hypertensive disorder of pregnancy for early postpartum follow-up:
 - Within 1 week (if medication was used to manage hypertension)
 - Within 1-2 weeks if medication was not used



DIAGNOSIS

- Evaluate pregnant patients with new onset or worsening hypertension in timely manner
- Be aware of variability in disease presentation and progression

See Back for More



TREATMENT

- Timely delivery for preeclampsia based on gestational age and severity of disease
- Timely treatment for severe hypertension (160 mmHg systolic and/or 110 mmHg diastolic) within 60 minutes

RESOURCES

[Relias OB](#) is a comprehensive program designed to improve quality and patient safety in five high-acuity obstetrical areas, including hypertensive disorders.

[Saving Mothers' Lives Now Toolkit](#) includes valuable resources to help nurses, providers, hospitals and health systems on their mission to reduce maternal mortality and morbidity and includes information on our [Mothers and Babies First](#) project.

[Driving Improvement in Hypertensive Disorders of Pregnancy](#) webinar shares a health system's implementation of a system-wide strategy aimed at improving maternal safety and driving high-reliability care.

1. Lo JO, Mission JF, Caughey AB. Hypertensive disease of pregnancy and maternal mortality. *Curr Opin Obstet Gynecol.* 2013;25(2):124-132.
2. Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, et al. Global, regional, and national levels and causes of maternal mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet.* 2014;384(9947):980-1004.
3. Main EK, McCain CL, Morton CH, Holtby S, Lawton ES. Pregnancy-related mortality in California: causes, characteristics, and improvement opportunities. *Obstet Gynecol.* 2015;125(4):938-947.



Sample Treatment Plan

for Severe Preeclampsia



Measure Blood Pressure
≥ 160 mmHg Systolic BP
≥ 110 mmHg Diastolic BP



Inform OB Team

CMQCC

California Maternal
Quality Care Collaborative



California Department of
PublicHealth

If Preeclampsia Present:



- IV Access
- Monitor FHT
- Send Labs



Seizure Prophylaxis

- Magnesium sulfate bolus dose 4-6 g (over 20 mins)
- Magnesium sulfate maintenance dose (1-2 g/hr)
- Check magnesium levels (if indicated)



IV Antihypertensive Medication

LABELTALOL

- Labetalol 20 mg
- Repeat BP in 10 mins; if elevated, administer Labetalol 40 mg
- Repeat BP in 10 mins; if elevated, administer Labetalol 80 mg
- Repeat BP in 10 mins; if elevated, administer Hydralazine 10 mg



Repeat BP in 10 mins; if remains elevated, **obtain anesthesia consult**

HYDRALAZINE

- Hydralazine 5-10 mg
- Repeat BP in 20 mins; if elevated, administer Hydralazine 10 mg
- Repeat BP in 10 mins; if elevated, administer Hydralazine 10 mg



Repeat BP in 20 mins; if remains elevated, **obtain anesthesia consult**

Emergent therapy for acute-onset, severe hypertension with preeclampsia or eclampsia. Committee Opinion No. 514. American College of Obstetricians and Gynecologists. Obstet Gynecol 2011; 118:1465-8

RELIAS