

PREECLAMPSIA

1. SCREENING

a) Careful history of risk factors

- Pregnancy history (IUGR, Abruption, Prior Hypertensive Disease, etc.)
- Maternal health history (diabetes, chronic hypertension, SLE, APLS, etc.)
- Current pregnancy factors (new partner, first pregnancy, age of mother, etc.)

b) Routine blood pressure assessments

c) Advanced screening tools if available to you

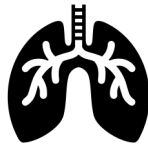
- Biochemical markers
- Ultrasound findings

Is ASA needed?
Is calcium needed?
Do you have a proteinuria baseline?
Are the patient's current BP meds safe in pregnancy?

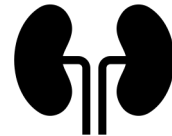
2. CLINICAL PRESENTATION & DIAGNOSIS



SBP > 140
DBP > 90
Chest pain



SOB
Pulmonary edema



Proteinuria
Oliguria
Edema



Lab changes :

- Low platelets
- Elevated liver enzymes
- Elevated uric acid
- Low albumin



Headache
Visual disturbances
Hyperreflexia
Seizures



RUQ pain
Nausea/Vomiting



Fetal concerns
- Growth
- Fluid levels

3. BLOOD PRESSURE MANAGEMENT

Oral Medication Options



Labetalol (chronic & acute BP management)
Nifedipine XR (chronic BP)
Nifedipine short-acting (acute BP)
Hydralazine (mostly acute BP management, sometimes chronic)
Methyldopa (chronic BP management)

IV Medication Options



Labetalol (acute only)
Hydralazine (acute only)

4. SEIZURE PROPHYLAXIS

MgSO₄ = Magnesium sulfate

REFERENCES

- August P, Sibai BM. Preeclampsia: Clinical features and diagnosis. Eds. Lockwood CJ, Barss VA. *UpToDate*. https://www.uptodate.com/contents/preeclampsia-clinical-features-and-diagnosis?search=preeclampsia&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1#H34. Last updated January, 2023.
- August P, Jeyabalan A. Preeclampsia : Prevention. Eds. Lockwood CJ, Barss VA. *UpToDate*. https://www.uptodate.com/contents/preeclampsia-prevention?search=preeclampsia&topicRef=6814&source=see_link. Last updated Jan 3, 2023.
- August P. Treatment of hypertension in pregnant and post-partum patients. Eds Lockwood CJ, Bakris GL, Barss VA. *UpToDate*. https://www.uptodate.com/contents/treatment-of-hypertension-in-pregnant-and-postpartum-patients?sectionName=Our%20approach&search=preeclampsia&topicRef=6825&anchor=H2742750444&source=see_link#H2742750444. Last updated November 2022.
- California Maternal Quality Care Collaborative [CMQCC]. Hypertensive disorders of pregnancy toolkit. <https://www.cmqcc.org/resources-tool-kits/toolkits/HDP>. Last updated 2021.
- Lee M, Guinn D. Antenatal corticosteroid therapy for reduction of neonatal respiratory morbidity and mortality from preterm delivery. Eds. Lockwood CJ, Martin R. Barss VA. *UpToDate*. https://www.uptodate.com/contents/antenatal-corticosteroid-therapy-for-reduction-of-neonatal-respiratory-morbidity-and-mortality-from-preterm-delivery?search=steroids%20for%20fetal%20lung%20maturity%20&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1. Last updated October 2022.
- Magee LA, Smith GN, Bloch C, Cote A, Jain V, Nerenberg K, von Dadeszen P, Helewa M, Rey E. Guideline No. 426 : Hypertensive disorders of pregnancy: Diagnosis, prediction, prevention, and management. *JOGC*. 2022; 44(5):547-571. <https://doi.org/10.1016/j.jogc.2022.03.002>
- Mari G. Fetal growth restriction : Evaluation. Eds. Lockwood CJ, Barss VA. *UpToDate*. <https://www.uptodate.com/contents/fetal-growth-restriction-evaluation>. Last updated Decemebr 2022.
- Norwitz ER. Preeclampsia: Antepartum management and timing of delivery. Eds. Lockwood CJ, Barss VA. *UpToDate*. https://www.uptodate.com/contents/preeclampsia-antepartum-management-and-timing-of-delivery?search=preeclampsia&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2. Last updated August 2022.
- Norwitz ER, Bellussi F. Early pregnancy prediction of preeclampsia. Eds. Lockwood CJ, Barss VA. *UpToDate*. https://www.uptodate.com/contents/early-pregnancy-prediction-of-preeclampsia?search=preeclampsia&topicRef=6814&source=see_link. Last updated June 2022.
- Norwitz ER. Preeclampsia : Intrapartum and postpartum management and long-term prognosis. Eds. Lockwood CJ, Barss VA. *UpToDate*. https://www.uptodate.com/contents/preeclampsia-intrapartum-and-postpartum-management-and-long-term-prognosis?search=preeclampsia&source=search_result&selectedTitle=3~150&usage_type=default&display_rank=3. Last updated Nov 2, 2022.
- Rabi DM, McBrien KA, Sapir-Pichhadze R, Nakhla M, Ahmed SB, Dumanski SM, et al. Hypertension Canada’s 2020 comprehensive guidelines for the prevention, diagnosis, risk assessment, and treatment of hypertension in adults and children. *Can. J. Cardiol*. 2020;36(5):596-624. Accessed via Hypertension Canada Website February 1, 2023. <https://guidelines.hypertension.ca/diagnosis-assessment/supplementary-tables/#suptbl1b>
- Society of Obstetricians and Gynecologists of Canada [SOGC]. Hypertensive Disorders of Pregnancy. In: *Course manual: Advances in labour and risk management*. 27th ed. Canada. SOGC; 2020-2021: 382-418.
- Thandhani RI, Maynard S. Evaluation of proteinuria in pregnancy and management of nephrotic syndrome. Eds Glasscock RJ, Barss VA, Lam AQ. *UpToDate*. https://www.uptodate.com/contents/evaluation-of-proteinuria-in-pregnancy-and-management-of-nephrotic-syndrome?search=preeclampsia&topicRef=6814&source=see_link. Last updated August 2021.
- Yaphe, J, Atzema, C, Helman, A. Hypertensive Emergencies. *Emergency Medicine Cases*. February, 2014. <https://emergencymedicinecases.com/episode-41-hypertensive-emergencies/>. Accessed Feb 1, 2023.