HYPERTENSION IN PREGNANCY

Hypertension in Pregnancy: Antepartum management in the absence of severe features

SUMMARY: Once a hypertensive disorder of pregnancy (gestational hypertension and preeclampsia, either alone or superimposed on preexisting /chronic hypertension) has been diagnosed, appropriate management is imperative to minimize maternal and fetal complications.

Rationale: Hypertensive disorders of pregnancy are a major health issue for women and their infants. The development of preeclampsia, either alone or superimposed on preexisting (chronic) hypertension, especially when severe features evolve, remains the major risk. Appropriate prenatal management, including timing of delivery, once such a diagnosis has been made can reduce the number and extent of serious maternal and fetal consequences that may occur. Frequent monitoring of women with hypertensive disorders of pregnancy is necessary. Those women diagnosed with gestational HTN often progress to preeclampsia or develop severe features within 1-3 weeks of diagnosis and those with preeclampsia without severe features already can develop severe features within days of diagnosis.

Advances in the understanding of preeclampsia are ongoing. In early 2011, American College of Obstetricians and Gynecologists (ACOG) convened a Task Force on Hypertension in Pregnancy to review available data and establish evidence-based recommendations for clinical practice. The Task Force Guidelines were published in 2013.

Diagnostic Criteria: Please see separate Toolbox document "Hypertension in Pregnancy: Diagnosis" for additional information.

Eligible patients: Any pregnant patient with a diagnosis of gestational hypertension, preeclampsia without severe features, or chronic hypertension with superimposed preeclampsia.

Contraindications: Presence of severe features, which includes BP above previously, described thresholds, proteinuria, thrombocytopenia, renal insufficiency, impaired liver function, pulmonary edema, and/or cerebral or visual symptoms. For management of pre-eclampsia with severe features, see separate Toolbox document “Hypertension in Pregnancy: Antepartum Management of Preeclampsia with Severe Features.”

Recommendations for Management:

1. At diagnosis, obtain the following:
   a. CBC with platelet count
   b. Serum creatinine
   c. Liver enzymes
   d. Urine protein by 24 hour collection or protein/creatinine ratio
   e. Assessment for any symptoms of severe preeclampsia
   f. NST
g. Ultrasound assessment of estimated fetal weight, amniotic fluid volume, and BPP if NST nonreactive

2. Consider antenatal corticosteroids to promote fetal lung maturity as appropriate (for guidelines on appropriate administration, see separate Corticosteroids Toolbox documents).

3. Hospitalize for delivery if 37 0/7 weeks' gestation or more OR sooner as indicated for other complications (e.g. development of severe features, abnormal fetal testing, fetal growth restriction with abnormal Dopplers, oligohydramnios, etc.).

4. Expectant management for gestational HTN and preeclampsia, in the absence of severe features, can occur either inpatient OR as an outpatient after a period of observation and should include the following:
   a. Daily fetal kick counts
   b. Ultrasound for assessment of fetal growth every 3 weeks (EFW < 5th centile at 34 weeks or more warrants delivery)
   c. AFI at least weekly (AFI < 5cm is diagnostic of oligohydramnios)
   d. NST twice weekly, with BPP if nonreactive (persistent BPP 6/10 or oligohydramnios may warrant delivery at 34 weeks or more)
   e. Twice weekly BP checks, minimum.
   f. Weekly serum laboratory assessments to include CBC, LFTS, and serum creatinine.
   g. Assess for symptoms of severe disease at each clinical interaction (severe headache, visual changes, epigastric pain, shortness of breath) and reinforce strict precautions to call/seek care if any of these develop.

Special Considerations:

1. There is insufficient evidence that antihypertensive treatment of non-severe maternal hypertension improves maternal or fetal outcomes. In the setting of gestational HTN and preeclampsia without severe features, antihypertensive therapy is not recommended.
2. Strict bedrest is not beneficial and increases the risk for thromboembolism.
3. Universal use of intrapartum magnesium sulfate seizure prophylaxis for all women with preeclampsia without severe features is not recommended. Certain signs and symptoms have been traditionally considered premonitory of seizure activity and magnesium should be considered. These include: headache, altered mental state, blurred vision, scotomata, clonus, and RUQ abdominal pain.
4. Progression to severe disease can occur in labor and postpartum. All women with a diagnosis of gestational HTN or preeclampsia without severe features should be observed closely for this progression and magnesium sulfate seizure prophylaxis should be administered if severe disease is diagnosed. To that end, it is suggested that BP be monitored in the hospital OR that equivalent outpatient surveillance be performed for at least 72 hours postpartum and again 7-10 days after delivery.


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