PROBLEM: Hypertensive Disorders in Pregnancy

**Chronic HTN**

- **Definition:** Mild: SBP ≥140-159 mm Hg, DBP ≥ 90-109 mm Hg
  - Use of anti-HTN medications before pregnancy
  - Severe: SBP ≥160 mm Hg DBP ≥110 mm Hg
  - Onset of HTN before the 20th week of gestation and persists 42 days postpartum

- **Medications**
  - ASA 65-85 mg po once a day after 12 – delivery
  - Stop Anti-hypertensives initially and recheck BP in one wk
  - If BP 160 / 110 mm Hg, then start
  - Labetolol 200-2400 mg orally in two or three divided doses
  - Nifedipine 30 to 120 mg qd as sustained release tablet
  - Avoid ACE Inhibitors

- **Medications**
  - ASA 65-85 mg po once a day after 12 – delivery

- **Labs:** Baseline – Cr, CBC, LFTs, spot total P/Cr ratio
  - Second line Tx:
    - Alpha-methldopa 250-3000 mg orally in two or three divided doses

- **Ultrasound**
  - 8-10 weeks initial
  - 20-22 weeks anatomy
  - 28-32 weeks growth, then every 4 weeks

- **Prenatal visits:** Every 4 weeks until 32 weeks, then every 2 weeks until 36 weeks, then weekly
  - **Delivery:** No meds 39-40 wks / Controlled on meds 39-40 wks / Difficult control > 37 wks

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**Pre-eclampsia**

- **Definition:** SBP > 140 mm Hg or DBP > 90 mmHg, upright following a 10 minute rest (Repeat in 4 hours to confirm dx)
  - Total P/Cr ≥ 0.3, or ≥300 mg of protein in a 24 hour urine specimen, or 2+ on urine dipstick
  - After 20 wks EGA
  - Can convert from GHTN without proteinuria if develops severe features
  - If Total P/C is 0.15 - 0.29, then obtain 24 urine PROT

- **Monitoring**
  - Labs:
    - Kick counts
    - NST 2x/wk and AF q week at Dx
    - PLt ct, Cr, LFTs q wk
  - U/S every 3-4 weeks

- **Prenatal visits:** weekly and check BP twice a week
  - **Delivery:** > 37 weeks

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**Pre-eclampsia with severe features**

- **Definition:** SBP > 160 mmHg or DBP > 110 mmHg on 2 occasions on bedrest
  - Total P/Cr ≥ 0.3, or ≥300 mg of protein in a 24 hour urine specimen, or 2+ on urine dipstick
  - Can convert from GHTN without proteinuria if develops severe features

- **Severe Features**
  - Cerebral or visual changes
  - Pulmonary edema
  - LFTs 2x normal
  - Creat > 1.1 or 2 x pt’s normal Creat
  - Thrombocytopenia, platelets <100,000

- **Plan:** Admit for Delivery. Magnesium sulfate in active labor with careful fluid management (3,000 cc Total Intake /24 hrs)
  - If < 34 weeks start steroids –see Guideline for details.
  - Low dose ASA with subsequent pregnancies

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**Chronic HTN with superimposed Pre-eclampsia**

- Management for pre-eclampsia as outlined above
  - > 37 weeks for superimposed pre-eclampsia
  - If severe features < 34 weeks start steroids –see Guideline for details.

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**Gestational HTN**

- **Definition:** BP > 140/90 without proteinuria after 20 weeks
  - HTN does not persist beyond 12 weeks postpartum
  - Can convert to severe preeclampsia without proteinuria if develops severe features

- **Labs:** Baseline – Cr, LFTs, CBC, Total P/Cr ratio
  - Management: Same as preeclampsia without severe features, except:
    - obtain urine Preeclampsia screen q visit
    - weekly NST/AFI

- **Ultrasound**
  - 20-22 weeks
  - 28-32 weeks, then every 4 weeks

- **Monitoring**
  - Kick counts
  - At 36 weeks start testing with NST/AFI weekly
  - If FGR, then add Doppler q week

- **Prenatal visits:** Every 4 weeks until 32 weeks, then every 2 weeks until 36 weeks, then weekly
  - **Delivery:** > 37 weeks

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