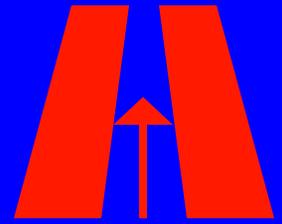




Prevention of Preeclampsia



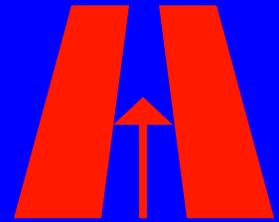
Limited by lack of knowledge: focus on women at high risk.

Unproved benefit: Low-dose aspirin
Calcium supplementation
Magnesium supplementation
Fish oil

Need more study: Vitamins C and E



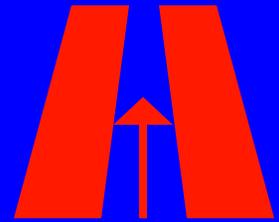
Preeclampsia



- **Goal is to prevent eclampsia and other severe complications.**
- **Attempts to treat preeclampsia by natriuresis or by lowering BP may exacerbate pathologic changes.**
- **Palliate maternal condition to allow fetal maturation and cervical ripening.**



Preeclampsia



Maternal Evaluation

Goals:

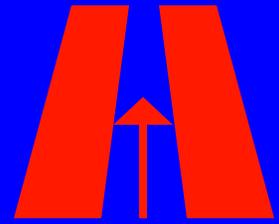
- Early recognition of preeclampsia
- Observe progression, both to prevent maternal complications and protect well-being of fetus.

Early signs:

- BP rises in late second and early third trimesters.
- Initial appearance of proteinuria is important.



Preeclampsia (cont.)

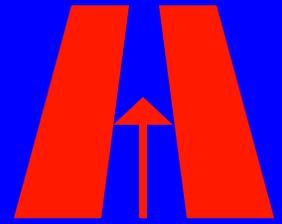


Maternal Evaluation (cont.)

- Often, hospitalization recommended with new-onset preeclampsia to assess maternal and fetal conditions.
- Hospitalization for duration of pregnancy indicated for preterm onset of severe gestational hypertension or preeclampsia.
- Ambulatory management at home or at day-care unit may be considered with mild gestational hypertension or preeclampsia remote from term.



Preeclampsia (cont.)



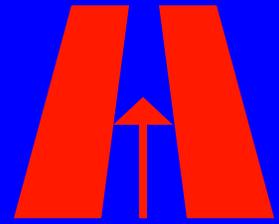
Antepartum Management of Preeclampsia

Little to suggest therapy alters the underlying pathophysiology of preeclampsia.

- Restricted activity may be reasonable.
- Sodium restriction and diuretic therapy appear to have no positive effect.



Preeclampsia (cont.)



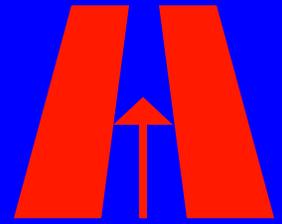
Indications for Delivery in Preeclampsia* - Maternal

- Gestational age 38 weeks
- Platelet count $< 100,000$ cells/mm³
- Progressive deterioration in liver and renal function
- Suspected abruptio placentae
- Persistent severe headaches, visual changes, nausea, epigastric pain, or vomiting

***Delivery should be based on maternal and fetal conditions as well as gestational age.**



Preeclampsia (cont.)



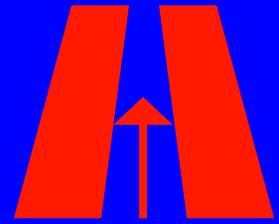
Indications for Delivery in Preeclampsia* - Fetal

- Severe fetal growth restriction
- Nonreassuring fetal testing results
- Oligohydramnios

*Delivery should be based on maternal and fetal conditions as well as gestational age.



Preeclampsia (cont.)

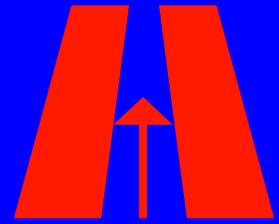


Route of Delivery

- Vaginal delivery is preferable.
- Aggressive labor induction (within 24 hours).
- Neuraxial (epidural, spinal, and combined spinal-epidural) techniques offer advantages.
- Hydralazine, nitroglycerin, or labetalol may be used as pretreatment to reduce significant hypertension during delivery.



Preeclampsia (cont.)

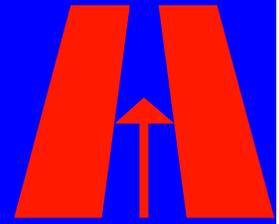


Anticonvulsive Therapy

- Indicated to prevent recurrent convulsions in women with eclampsia or to prevent convulsions in women with preeclampsia.
- Parenteral magnesium sulfate reduces the frequency of eclampsia. (Caution in renal failure.)



Treatment of Acute Severe Hypertension in Pregnancy



SBP \geq 160 mm Hg and/or DBP \geq 105 mm Hg

- Parenteral **hydralazine** is most commonly used.
- Parenteral **labetalol** is second-line drug (avoid in women with asthma and CHF.)
- Oral **nifedipine** used with caution. (Short-acting nifedipine is not approved by FDA for managing hypertension.)
- **Sodium nitroprusside** may be used in rare cases.