# Management of Preeclampsia – Recent Guidelines - Dr. Shashwat Jani

Hypertensive disorders are common complications of pregnancy, affecting 8% to 10% of all gestations. Approximately 1/3 of hypertensive disorders in pregnancy (HDP) are due to chronic hypertension and 2/3 are due to gestational hypertension–preeclampsia. The spectrum of the disease ranges from mildly elevated blood pressures with minimal clinical significance to severe hypertension and multi organ dysfunction.Hypertensive disorders of pregnancy (HDP) are one of the major causes of maternal morbidity and mortality leading to 10-15% of maternal deaths.

**Updated Classification of Hypertensive disorders of pregnancy :**

1. Preeclampsia (PE) (BP elevation after 20 weeks of gestation with proteinuria OR any of the severe features of preeclampsia)
2. Chronic hypertension (CHTN, of any cause that predates pregnancy)
3. Chronic hypertension with superimposed preeclampsia (chronic hypertension in association with preeclampsia)
4. Gestational hypertension (GH: BP elevation > 20 weeks of gestation in the absence of proteinuria or any of the severe features of preeclampsia.

**Major changes of the new classification are as follows:**

(1) HDP is defined as hypertension in pregnancy. (2) Eclampsia was removed from the major classification. (3) Chronic hypertension was added to the major classification. (4) If pregnant women with new onset of hypertension have either maternal organ dysfunction or uteroplacental dysfunction, they should be diagnosed with preeclampsia, even in the absence of proteinuria. (5) The severity classification should be 'severe' when hypertension is severe, or when hypertension is mild but there is maternal organ dysfunction or uterine placental dysfunction. The term 'mild' was excluded from the criteria of HDP because it can be misinterpreted to mean 'not at high risk'. (6) The definition of 'early onset type' is that which appears earlier than 34 weeks gestation, in accordance with international standards.

**TREATMENT OBJECTIVES:**

- To stabilize the hypertension and to prevent severe pre-eclampsia. • To prevent the complications. • To prevent eclampsia.
- Delivery a healthy baby in optimal time. • Restoration of the health of the mother in Puerperium.

**Pre-eclampsia without severe features:**

> 37 weeks gestation: deliver < 37 weeks gestation: expectant management until term or maternal/fetal indication for delivery

– Bedrest no longer "suggested" – Serial maternal assessment (BP, symptoms, labs, weight gain)
– Serial fetal assessment (NST/BPP, fetal kick count, serial Us for AFI and growth) – Oral antihypertensives.

**Severe Preeclampsia :**

> 34 weeks: deliver
33-34 weeks: steroids and deliver after 48 hours if maternal/fetal status allows
22-32 weeks: antihypertensive meds(oral/IV), steroids, extensive counseling, close surveillance deliver for maternal/fetal indications or 34 weeks gestation

< 22 weeks : expectant mgmt not recommended

***Start MgSO4 upon diagnosis irrespective of GestestionalAge .***

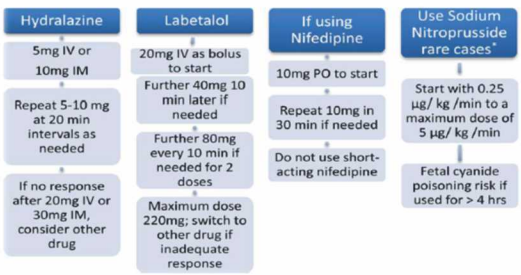
**Antihypertensive therapy for Preeclampsia :**

Antihypertensive therapy should be started with systolic BP =/> 150 and /or diastolic BP =/> 100 mm Hg.
Aim of therapy should be to lower BP to < 140 mmHg systolic and < 90 mmHg diastolic.
Oral antihypertensive agents to be used are: alpha methyldopa, labetalol, and nifedipine.

**Treatment of Mild Preeclampsia :**

| | Mode of Action | Starting Dose | Maximum Dose | Contra-indications | Breast Feeding |
|---|---|---|---|---|---|
| Methyl Dopa | Centrally acting α agonist | 250mg bd | 1 gram tds | Depression | Yes |
| Labetolol | α + β antagonist | 100mg bd | 600mg qid | Asthma | Yes |
| Nifedipine SR | Ca channel antagonist | 10mg bd | 40mg bd | | Yes |
| Hydralazine | Vasodilator | 25mg tds | 75mg qid | | Yes |

**Treatment of Severe Preeclampsia :**




- Lower BP promptly but slowly: AIM for BP < 150/100 mm Hg
- Loading Dose of MgSO4 is Recommended to Prevent Eclampsia in all Severe Preeclampsia.
- Expectant management is done at tertiary centre only if there is no maternal organ involvement there is no immediate danger to fetus to get time to use steroids for fetal lung maturity.

**TIMING OF DELIVERY :**

- Gestational hypertension can be taken to term.
- Mild preeclampsia should be delivered at 37 weeks.
- Severe preeclampsia should be delivered after 34 weeks.
- Eclampsia should be delivered once stabilized with MgSO4 at any weeks of gestation.
- Corticosteroids are given for fetal lung maturity where appropriate.
- Intramuscular Dexamethasone 6 mg 6 hourly 4 doses or 12 mg 12 hourly 2 doses.
- Cesarean section is done for Obstetric indications only.