7.2 Pregnancy Induced Hypertension (PIH)

- Rise in blood pressure during pregnancy of ≥140/90
- **Pre-eclampsia**: Rise in blood pressure during pregnancy PLUS proteinuria
- **Eclampsia**: Occurrence of convulsion (fits) in patient with pre-eclampsia where other causes of convulsion have been excluded

**Treatment of Mild to Moderate Pre-eclampsia**

**General measures**
- Regular check of BP
- Monitoring of foetal wellbeing
- Monitoring of proteinuria
- Advice on adequate rest
- Advise on regular use of cocoa containing food
- Exclude UTI
- Check urine for protein
- Count this as a high risk antenatal patient

**Medicine**

- **A**: Methyldopa 250-500mg 8 hrly
- **OR**
- **C**: Nifedipine 10 mg 12 hourly

**Severe Pre-eclampsia**

Criteria for diagnosis: Blood pressure ≥ 160/110; Severe headache, Epigastric/retrosternal pain, Blurring of vision, Hyperreflexia, Oliguria, Proteinuria ≥5g/24hrs collection (≥+3 in dip stick) and Intrauterine growth restriction (IUGR).

**General measures**

- Admit in the hospital
- Give
  - **B**: Normal saline
  - **Plus**
  - **C**: Nifedipine 10-20 mg 12 hrly;
  - **Plus**
  - **C**: Hydralazine 10 mg (I.V) slowly
  - **Plus**
  - **B**: Magnesium sulphate 4gm (IV) in 20 mls of normal saline for 10-15 min followed by 5gm of 50% MgSO₄ in each buttock; Followed by 4gm of MgSO₄ in 250 mls of normal Saline to run over 4hrs. Maintenance dose: 4gm of MgSO₄ (IM alternative buttock) 4hourly for 24hrs.

Deliver as soon as the BP is controlled.

**Note**: MgSO₄ regimen should continue until 24 hrs after the last fit.

**Eclampsia**

**General principle**
• Control fits
• Control Blood pressure
• Deliver

General measures
• Keep the airway clear
• Fluid and electrolyte balance

Treatment
• Give magnesium sulphate as above
• Give anthypertensive as above
• Fluid management as above
• Deliver vaginally unless there is another obstetric indication for caesarean delivery

Mild PIH
Diastolic: 90 – 100 mm and no proteinuria
Advice bed rest
• Weekly antenatal clinic visits
  A: Acetylsalicylic acid (O) 75 mg once daily

Moderate PIH
Diastolic: 100-110 mm, no proteinuria

Treatment
  A: Acetylsalicylic acid (O) 75 mg once daily. Plan immediate delivery at gestation > 37 weeks

Admit and monitor BP up to 6 times per day, and give
  A: Metyldopa (O) 250 – 500 mg every 6-8 hours daily

Severe PIH
Diastolic > 110

Treatment
  C: Nifedipine (Sublingually) 10 mg
The need for more doses indicates the urgency for delivery.

Pre-Eclámptica Toxemia (Proteinuria PIH)

Management
• Exclude UTI
• Check urine for protein daily
• Plan delivery at 37 weeks or before

Treatment
  A: Acetylsalicylic acid 75 mg once daily
**Imminent Eclampsia**
This is proteinuria PIH characterized by visual disturbance or epigastric pain and or signs of brisk reflexes.

**Management**
- Plan urgent delivery
- Prevent convulsions by
  - **A:** Diazepam (I.V – infusion) 40 mg diluted in 1 litre of Sodium chloride 0.9% over 6 hours

**Treatment**
If diastolic pressure still >110 mm give antihypertensive:
- **C:** Hydralazine 12.5 (I.M) intermittently
- **OR**
- **C:** Nifedipine (sublingually) 10 mg.

**Eclampsia (Proteinuria PIH with Fits)**

**Treatment**
- **A:** Diazepam (IV infusion) 40 mg diluted in 1000 ml of normal saline infused over 6 hours
- If diastolic pressure> 110 mm give antihypertensive as above
- Plan urgent delivery