Pre Eclampsia
This is pregnancy-induced hypertension (BP 140/90 or greater), with proteinuria. It is a multi-system disorder.

Eclampsia
It is associated with pre-eclampsia, but seizures can occur without any previous signs or symptoms. Severe hypertension (diastolic blood pressure exceeding 110mm of mercury) increases the risk of eclampsia and control of blood pressure is an important part of the management.

- Deliver within 24 hours for severe pre-eclampsia (see induction of labour)
- Deliver within 12 hours of onset of convulsions
- Expectant management with monitoring for mild pre-eclampsia until 36 weeks; induce labour after 37 week
- Induction methods include, oxytocin, prostaglandins including misoprostol and balloon catheter amniotomy (WHO Managing Complications in Pregnancy and Childbirth, 2006)

Blood Pressure Control
Always use current RH guidelines

- Hypertension should be treated if systolic pressure of more than 170mm Hg or diastolic BP more than 110mm Hg or MAP>125mm Hg.
- Aim to reduce BP to around 130-140/90-100mm Hg
- Monitoring foetal heart during start of treatment is vital as a rapid fall in maternal blood pressure can affect foetal heart rate, in growth- restricted or compromised foetus.
- Intravenous hydralazine or labetalol may be used to lower the blood pressure.
- Hydralazine may cause increased maternal heart rate,
- Labetalol is preferable if the maternal pulse exceeds 120 beats per minute.
- Nifedipine can be used if no hydralazine or labetalol.
- For gestation less than 36 weeks, give betamethasone 12mg I Min 2 doses 24 hours apart to improve foetal lung maturity and prevent neonatal respiratory failure

Induction of labour
Recommended:
- Oral misoprostol 25 mcg every 2 hours
- Low dose vaginal misoprostol 25 mcg every 6 hours
- Low dose vaginal prostaglandins
- Balloon catheter
- Combination of balloon catheter plus oxytocin as an alternative method when Prostaglandins (including misoprostol) are not available or contraindicated
- Oral or vaginal misoprostol for IUD in third trimester
- Sweeping membranes for reducing formal induction of labour

Not recommended
- Amniotomy alone
- Misoprostol in women with previous caesarean section
- WHO recommendations for induction of labour 2011

Eclampsia
NEVER LEAVE THE PATIENT ALONE
Place in recovery position. Protect from injury. Do not restrain. CALL FOR HELP (Doctor, CHO, etc). Always use your guidelines

AIRWAY and BREATHING
Assess Airway: Maintain patency
- Consider oropharyngeal airway
- High concentration O₂ by mask and reservoir if available
- Ventilate as required

CIRCULATION
- Evaluate pulse and BP
- If absent, initiate CPR. Secure IV access as soon as possible. Urinary catheter
- Restrict IV fluids to no more than 100ml/hour
**CONTROL SEIZURES with Magnesium Sulphate**

**Loading Dose:**
5g (10ml of 50% solution=5g in 10ml) by deep intramuscular injection in each buttok (plus 1ml of 2% lidocaine in same syringe). To give a total dose given= 10grams.

**AND** 4g of 20% solution IV over 5 minutes

**HAND WASHING and ASEPTIC TECHNIQUE ESSENTIAL**

**Maintenance Dose**
5g of 50% solution IM 4 hourly (plus 1ml of 2%) in same syringe) using alternate buttocks.

Continue for 24 hours after the last convulsion or delivery.

**Remember** to subtract volume infused from total maintenance infusion volume to avoid fluid overload

**Stop infusion if:**
Urine output <100ml in 4 hours
OR if patellar reflexes are absent
OR if respiratory rate <16/minute
OR if SaO2<90%

**If seizures recur within 15 minutes** 2g MgSO4 as per loading. If this fails: diazepam 10mg IV

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**CONTROL HYPERTENSION**

**Treat hypertension** if systolic BP>170mm Hg or diastolic BP>110mm Hg or MAP>125mm Hg

Aim to reduce BP to around 130-140/90-100mm Hg

**Hydralazine** 10mg IV slowly (WHO 5mg). Repeated doses of 5mg IV 30 minutes apart may be given if necessary. If maternal heart rate> 120 do not give hydralazine but labetolol

**Labetolol** 10mg IV slowly if BP still uncontrolled

If necessary repeat after 20 minutes, increase dose to 20mg, then 40 mg or start IV infusion: 200mg in 200ml 0.9% saline at 40mg/hour

**Nifedipine** dose 5 mg under the tongue. Repeat after 10 minutes if BP >110mm Hg

**Keep IV fluids at a rate < 100 mls per hour.**

**DELIVER BABY**

**CONTINUE** to observe closely as the majority of eclamptic seizures occur after delivery

**Monitor:** Hourly urine output respiratory rate, O2 saturation and patellar reflexes - every 10 minutes for first 2 hours and then every 30 minutes

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**If Respiratory Depression** Chest Inflations with bag and mask and Antidote: 10% calcium gluconate 10ml IV over 10 minutes

**If pulmonary oedema** give IVfrusemide 40mg

**Ergometrine should NOT be used as it can induce convulsions and cardiovascular accidents**