Government of Sierra Leone
Ministry of Health and Sanitation

Doing Saves Lives
How to Manage Emergencies

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 around130-140/90-100mm 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,
- **Labetalo**l is preferable if the maternal pulse exceeds 120 beats per minute.
- **Nifedipine** can be used if no hydralazine or labetolol.
- 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 O_2 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

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CONTROL SEIZURES with Magnesium Sulphate

Loading Dose:

5g (10ml of 50% solution=5g in10ml) by deep intramuscular injection in each buttock (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 Sa O_2<90%

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

CONTROL HYPERTENSION

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

Aim to reduce BP to around130-140/90-100mm Hg

Hydralazine10mg 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

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

If pulmonary oedema giveIVfrusemide40mg

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