

## 2-1 Eclampsia v.1

Tonic clonic seizure in a pregnant or recently pregnant woman with known / suspected or undiagnosed pre-eclampsia. The seizures typically self-terminate after 1–2 minutes, however the woman may remain drowsy afterwards

### START

- 1 **Call for help** (obstetrician, midwife, anaesthetist, +/- neonatal team)
  - ▶ Ask: “who will be the team leader?”
  - ▶ **Team leader assigns** checklist reader and scribe
  - ▶ **Request eclampsia drug box**
- 2 **Airway & breathing**
  - ▶ Position woman in left lateral (recovery) position
  - ▶ If airway obstructed → perform head tilt/chin lift or jaw thrust
  - ▶ Start oxygen at 15 L/min via reservoir mask (titrate to SpO<sub>2</sub> 95-98%)
- 3 **Circulation**
  - ▶ Start continuous monitoring: SpO<sub>2</sub>, respiratory rate, 3-lead ECG and blood pressure
  - ▶ Insert wide bore IV access
  - ▶ Take bloods: FBC, U&E, clotting, LFTs, blood glucose, venous blood gas
  - ▶ If IV fluids are running → stop fluids
  - ▶ Insert urinary catheter, document fluid balance
- 4 **Check for and treat seizures**
  - ▶ Give IV magnesium sulfate bolus and infusion (**Box A**)
  - ▶ Protect woman from trauma. Do not restrain
  - ▶ If recurrent or prolonged seizures, consider other diagnoses (**Box B**)
  - ▶ Check blood glucose
  - ▶ Check neurology
- 5 **Check for and treat hypertension (Box C)**
- 6 **Plan for birth (stabilise woman's condition prior to birth)**
- 7 **Plan ongoing care in a suitable location**

#### Box A: Magnesium sulfate emergency regimen

##### Loading dose:

- ▶ 4 g magnesium sulfate IV over 5 minutes (8 mL (4 g) 50% MgSO<sub>4</sub> diluted to 20 mL with 0.9% saline)

##### Maintenance infusion:

- ▶ 1 g/hr magnesium sulfate IV infusion (20 mL (10 g) 50% MgSO<sub>4</sub> diluted to 50 mL with 0.9% saline, infused at 5 ml/hr)
- ▶ If creatinine >90µmol/L start at 0.5g/hr and recheck Mg levels in 4 hrs

##### Recurrent seizures:

- ▶ 2 g magnesium sulfate over 5 minutes (4 ml (2 g) 50% MgSO<sub>4</sub> diluted to 10 ml with 0.9% saline)

##### Treatment for magnesium toxicity

- ▶ 1g calcium gluconate

#### Box B: Alternative diagnosis for seizure

Hypo/hyper glycaemia, hyponatraemia, epilepsy, hypoxia, hypercarbia, hypotension, intracranial bleed, cerebral vein thrombosis, space-occupying lesion, drugs.

#### Urgent CT/ MRI head if diagnosis remain uncertain

#### Box C: Treatment of severe hypertension

##### PO Labetalol (AVOID in women with asthma)

- ▶ 200 mg orally. Can repeat after 15–30 minutes
- ▶ Maintain with 200 mg orally TDS if good response

##### PO Nifedipine (if asthmatic, or labetalol is ineffective)

- ▶ 10 mg modified release orally
- ▶ Maintain with 10 mg BD if good response

##### IV Labetalol (5 mg/ml) (AVOID in women with asthma)

- ▶ Loading dose: 50 mg (10 mL) over 2 minutes. Can repeat every 5 minutes to a maximum of 4 doses (200 mg) if needed
- ▶ Maintenance: Start at 4 ml/hr; double rate every 30 minutes until BP controlled (max rate 32 ml/hr)

##### IV Hydralazine (1 mg/ml) (if nifedipine or IV labetalol ineffective)

- ▶ Loading dose: 5 mg (5 ml) over 15 min. Can repeat after 20 min
- ▶ Maintenance: start at 5 ml/hr titrate to response (max rate 18 ml/hr)