

Non-CPR scenario

Case: Pre-eclampsia / Eclampsia

Patient: 42 years old, multiparous, 31/40 pregnant,
admitted to antenatal ward from midwife-led clinic with:

BP 205/130
Proteinuria ++++
Gross generalised oedema.

Initial observations: Height 157 cms, Weight 103 kgs (BMI 42)
Complaining of headache and photophobia
BP 200 / 125, HR 100 / '
SpO₂ 98% on air
Auscultation: AE l = r = normal, BS vesicular, nil added
Urine output: ~ 70 mls in last 4 hours
Reflexes: brisk
FBC: Hb 107 g/l, WBC 14.1, Plt 130
U&E: Na 135, K 4.3, U 8.2, Crea 93
Urate 0.42
Coag: PT 15.2, APTT 31
Ultrasound (Placental Doppler): poor end-diastolic flow,
FH 140', good variability

Issues to be addressed: follow local/regional pre-eclampsia protocol

- blood pressure control (iv labetalol; dose and administration as per protocol)
- consider invasive BP monitoring
- fluid management (85 mls/hr), consider invasive CVP monitoring
- consider early delivery

BP now 160/90

Specialties to be involved: Obstetrics, Anaesthesia, Neonatology

While above issues are being addressed:

You are called back urgently as patient is having a tonic-clonic grand mal seizure.

Management: measures to prevent / minimise aorto-caval compression
A (especially oxygen) – B – C ...
Seizure control with MgSO₄ 16 mmols (4 g) slowly iv
Consider other causes of seizure

BP now 150/90; Fetal heart rate monitoring: ↓ to 75 / ' , good recovery after seizure stopped, further management: MgSO₄ infusion at 1 g / hour.

What would you do if Mg ineffective? (Phenytoin, lorazepam etc)

Decision to deliver baby

After reduction in blood pressure and successful seizure control decision is made to deliver the baby as soon is possible.

Fetal heart monitoring is unremarkable and repeat bloods are essentially unchanged. Following discussion between senior obstetricians and anaesthetists it is agreed that a caesarean section will be performed under spinal anaesthesia.

Delivery of baby is uneventful, perioperative blood pressure is relatively stable with one episode of relative hypotension (MAP 60 mmHg) successfully managed with small doses of Phenylephrine (100 mcg in total) and a total infused volume of crystalloid of 1000 mls. (How do you dilute phenylephrine? 10mg/ml 1ml amp into 20ml and then 1ml of this into 10ml gives 50mcg/ml solution)

Transfer to Recovery / High Dependency Area where management is undertaken as per pre-eclampsia protocol:

- Invasive arterial blood pressure monitoring
- Urine output monitoring
- Fluid restriction (85 mls/hr)
- Blood pressure control with iv Labetalol
- Seizure control with MgSO₄ infusion

6 hours later you are called to review the patient in Recovery. She is complaining of shortness of breath and a feeling of tightness in her chest.

She is tachypnoeic (28 breaths/minute), her SpO₂ is 93% on 4l/min of O₂ & urine o/p is still poor.

On auscultation, she has widespread fine crackles with occasional rhonchi.

What has happened?

Management:

- Increase FiO₂
- Chest x-ray
- Involve ICU senior clinician: ? admission
 - ? CPAP
 - ? CVP monitoring
 - ? Echo
- Consider diuretics
- Consider bronchodilators
- Involve Renal Medicine if oliguria ongoing problem

Equipment: table/chair etc

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