MANAGEMENT OF PREECLAMPSIA

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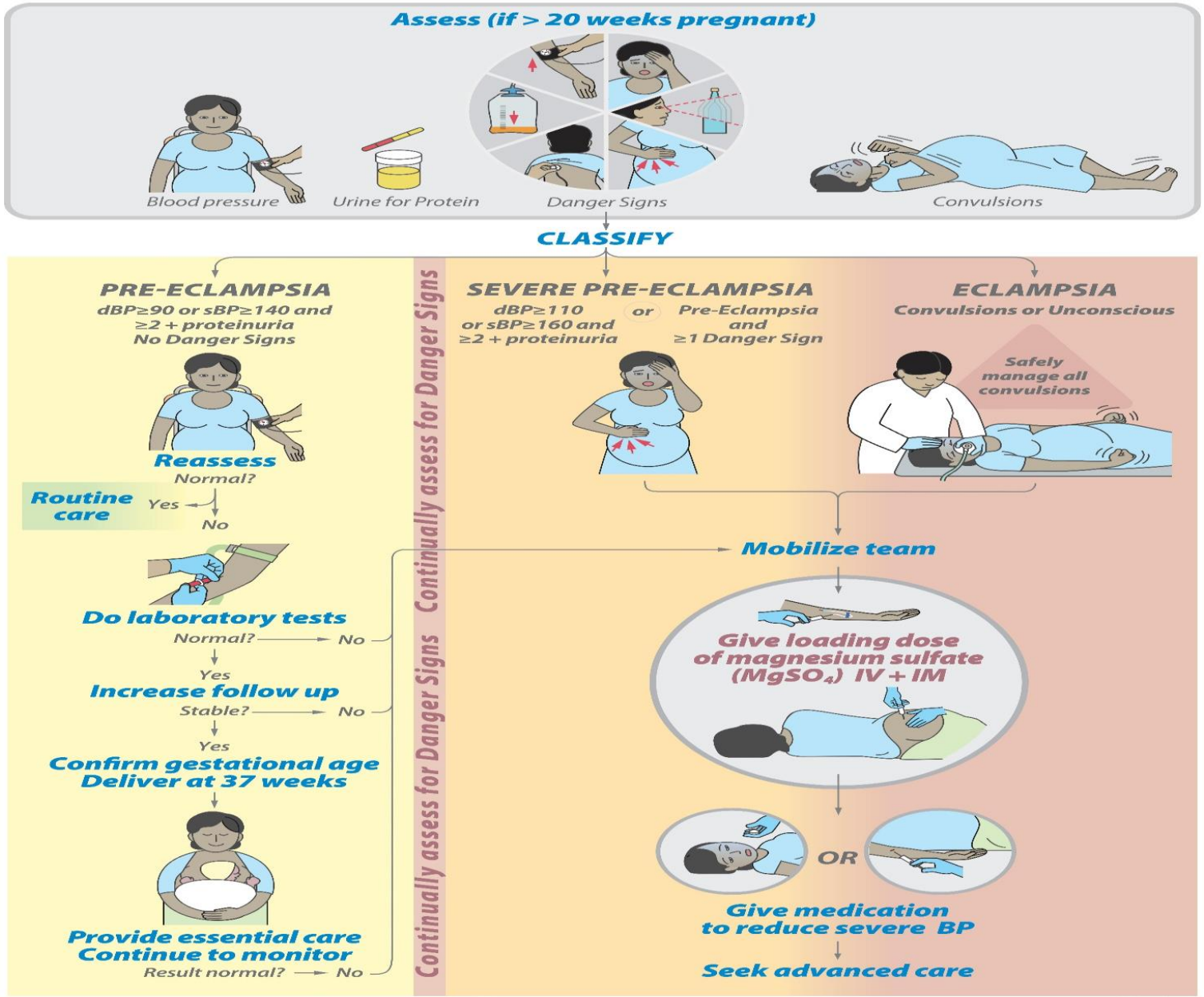
Helping Mothers and Babies Survive

Pre-Eclampsia & Eclampsia

ACTION PLAN 1



SIGNS &SYMPTOMS

- The severe features can be:
  - *Symptoms*
  - *Physical examination findings*
  - *Laboratory findings*
  - *Imaging findings*

MANAGEMENT OF PRE-ECLAMPSIA

- The goals of management of pre-eclampsia are:

1. Prevention or control of seizures / convulsions / fits (eclampsia)
2. Control of hypertension
3. Delivery of the baby
4. Post delivery and long term follow up
5. Prevention of recurrence

GOAL 1: PREVENTION & OR CONTROL OF SEIZURES

- Drug of choice is magnesium sulphate
- Given as Loading and maintenance doses

Loading dose: total of 14g

- IV 4g of 20% followed by IM 5g of 50% with 1 ml of 2% lignocaine in each buttock
- Draw 8 mL of a 50% MgSO4 and add 12 mL of water for injection or normal saline: this is equal to 4 g of 20% MgSO4
- Give the solution as a slow IV bolus over 20 minute

GAO1: PREVENTION & OR CONTROL OF SEIZURES

Maintenance dose of Magnesium Sulphate:

- IM 5g of 50% with 1 ml of 2% lignocaine 4 hourly in alternate buttocks for 24 hours from delivery or convulsion whichever occurred last
- If a patient convulses again while receiving $MgSO_4$, give IV 2g of 20% & continue with maintenance dose
- Clinical assessment for magnesium toxicity should be every 1 to 2 hours
- **Maintenance dose is only given or continued when**:
  - ✓ Patellar reflex is present
  - ✓ Respiratory rate exceeds 12 breaths/minute,
  - ✓ Urine output exceeds 100 mL over four hours

GOAL 2: TREATMENT OF HYPERTENSION

Non severe hypertension : systolic BP ≥140 mmHg to 159 mmHg and / or diastolic BP ≥90 mmHg to 109 mmHg

- Drugs of choice are all orals : (Do not give subligual Nifedipine however high the BP)
- labetalol, nifedipine, or methyldopa or a combination
- Dosages should be titrated accordingly with response
- Should be lowered gradually over hours to days
- Target blood pressure is (130-139)/80-89 mmHg

GAOL 2: TREATMENT OF HYPERTENSION

Severe hypertension : Systolic BP >=160 mmgh and /or DBP>=100mmgh

Hydralazine

- hydralazine 5 mg IV slowly over 10- 15 minutes every 30 minutes until dBP is down to <110 mmHg and systolic< 160 mmHg
- Maximum dose 20mg in 24 hours
- Once blood pressure is reduced to non-severe levels (lower than 160/110mmHg), ongoing treatment should be continued using oral medication

Labetalol (Trandate):

- Give Labetalol 20 mg in slow IV over 2 minutes. Double the dose every 20 minutes until dBP is <110 mmHg (total dose not to exceed 300mg in 24 hours).
- At a BEMONC site, give initial treatments and refer to the CEMONC sites for continuation and delivery plan
- Given the short duration of action of IV drugs, give IV and start orals immediately

INTRAPARTUM CARE

- Route of delivery: Vaginal unless other obstetric reason for C/S
- **Pre-eclampsia or eclampsia is not an absolute indication for C-section**
- Decision to expedite delivery, does not mandate immediate caesarean birth
- Continuous maternal-foetal monitoring is indicated intrapartum
- Strict fluid input and output monitoring
- Limit fluid intake to 80mls per hour

POSTPARTUM CARE

- Close monitoring of vital signs for at least 3 days, Do not discharge a preeclamptic before day 3
- Some patients will require longer monitoring
- Repeat laboratory tests (platelet count, creatinine, liver transaminases) daily until two consecutive sets of data are normal or trending to normal
- Complete $MgSO_4$
- Adjust antihypertensive therapy accordingly

GOAL 4: POSTPARTUM FOLLOW UP

- Tapering of antihypertensive is favoured over abrupt total stoppage
- Blood pressure should continued to be monitored after stopping antihypertensive
- Unless unstable, mothers can be discharged on day 5 post delivery
- Review at 1 week, 2 weeks, 6 weeks and 12 weeks postpartum
- Some mothers may require more frequent follow up
- Repeat labs at each of those follow ups
- Additional work up such as cardiac echo, ECG will vary from one patient to another

GOAL 4: LONG TERM COMPLICATIONS

Pre-eclampsia survivors are at an increase risk of the following

- ✓ Recurrent pre-eclampsia, fetal growth restriction, preterm delivery, abruptio placentae, and stillbirth in subsequent pregnancy (The GREAT Obstetric syndrome)
- ✓ Chronic hypertension, cardiovascular disease (CVD, including coronary heart disease, stroke, and heart failure)
- ✓ Chronic kidney disease
- ✓ Diabetes mellitus
- ✓ Depression, anxiety and PTSD

GOAL 4: FOLLOW UP

- Mothers should be educated on these & strategies to reduce risk of complications
  - ✓ Regular screening for HTN, CVD, CKD, DM, PTSD, Depression, etc.
  - ✓ Regular BP monitoring
  - ✓ Appropriate weight
  - ✓ Healthy diet
  - ✓ Exercise
  - ✓ Preconception optimisation

GOAL 5: WHO REMEMBERS?

THANK YOU FOR LISTENING