



**MANAGEMENT OF WOMEN
WITH PRE-ECLAMPSIA AND ECLAMPSIA**

***WHO recommendations for the use of Magnesium Sulphate
at the primary health care level***

Extract from WHO's Essential Care Practice Guidelines for Pregnancy and Childbirth

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Give magnesium sulphate
If eclampsia or severe pre-eclampsia

IV/IM combined dose (loading dose)

- Insert IV-line and give fluids slowly (normal saline or Ringer's lactate)
- Give 4 g of magnesium sulphate (20 ml of 20% MgSO₄ solution) IV **slowly** over 5-10 minutes. (Patient may feel warm during injection.)

AND:

- Give 10 g of magnesium sulphate IM: give 5 g (10 ml of 50% MgSO₄ solution) IM deep in upper outer quadrant of each buttock with 1 ml of 2% lignocaine in the same syringe.

If unable to give IV, give IM only (loading dose)

- Give 10 g of magnesium sulphate IM: give 5 g (10 ml of 50% MgSO₄ solution) IM deep in upper outer quadrant of each buttock with 1 ml of 2% lignocaine in the same syringe.

If convulsions persist/recur

- After 15 minutes give an additional 2g of magnesium sulphate (10 ml of 20% MgSO₄ solution) IV over 20 minutes. If convulsions still continue, give diazepam.

If referral is delayed for long or the women is in late labour, continue treatment

- Give 5 grams of 50% magnesium sulphate solution IM with 1 ml of 2% lignocaine every 4 hours in alternate buttocks until 24 hours after birth or after last convulsion (whichever is later).
- Monitor urine output: collect urine and measure the quantity
- Before giving the next dose of magnesium sulphate, ensure:
 - knee jerk is present
 - urine output > 100ml/4hrs
 - respiratory rate > 16/min
- **DO NOT** give the next dose if any of these signs:
 - knee jerk is absent
 - urine output < 100ml/4hrs
 - respiratory rate < 16/min
- Record findings and drugs given.

Dose		Formulation of magnesium sulphate	
		50% solution: vial containing 5 g in 10 ml (1g/2ml)	20% solution: to make 10 ml of 20% solution, add 4 ml of 50% solution to 6 ml of sterile water
IM	5 g	10 ml and 1 ml 2% lignocaine	Not applicable
IV	4 g	8 ml	20 ml
	2 g	4 ml	10 ml

After receiving magnesium sulphate a woman may feel flushing, thirst, headache, nausea or may vomit.

Important considerations in caring for a woman with eclampsia or pre-eclampsia:

- Do not leave the woman on her own
 - Help her into the left side position and protect her from fall and injury
 - Place padded tongue blades between her teeth to prevent a tongue bite, and secure it to prevent aspiration (**DO NOT** try this during a convulsion).
- **The only effective treatment for eclampsia is delivery.**
- Give magnesium sulphate slowly over 20 minutes. **Rapid injection can cause respiratory failure or death.**
- If respiratory depression (breathing less than 16/min) occurs after magnesium sulphate, do not give any more magnesium sulphate. **Give the antidote: calcium gluconate 1 gram IV (10 ml of 10% solution) over 10 minutes**
- **DO NOT** give IV fluids rapidly
- **Refer urgently to hospital** unless delivery is imminent
 - If delivery is imminent, deliver the baby first and accompany the woman during transport to the hospital
 - Keep her in the left side position
 - If a convulsion occurs during the journey, give magnesium sulphate and protect her from fall or injury