

No 1: Magnesium Sulphate for neuroprotection for <30 weeks gestation* - Nov 2024

Care with MgSO₄

Loading dose: 4 g (20% MgSO₄ premixed) 20mls given over 10-15 minutes at 120mls/hour via syringe driver

Maintenance: 1g/hour (20%) draw up 50mls (10g) and give at 5mls hour

If known renal disease or PET- baseline renal function required

Observations:

- Commence Fluid Balance chart
- Baseline TPR BP and reflexes, repeat at 10 minutes and again at 30 minutes, then hourly (unless condition indicates more) (this will require being proficient in performing reflexes)
- Continuous CTG (decreased variability possible)

STOP and seek obstetric review if:

- RR 4 below baseline
- Absence of patellar reflexes

MgSO₄ Toxicity:

If required Calcium Gluconate (10%) can be given - 10mls over 10minutes

If discontinue MgSO₄ then discontinue continuous monitoring.

If contractions settle but still potential for birth then make individualised plan on need for continuous monitoring

References:

NICE (NG25) 2022 Preterm labour and birth
BAPM (2019) Perinatal Management of Extreme Preterm Birth before 27 weeks of gestation: A Framework for Practice

Present to Labour Ward / Assessment Unit in threatened preterm labour:

- Full assessment by midwife
- CTG / IA in line with local policy from 26 weeks
- Obstetric Review (including use of Extremes of viability form) Confirm presentation - USS.
- Discussion with Neonatal team (including counselling)

Planned PTB (IOL/
caesarean birth)

Fetal/maternal Indication

Threatened preterm labour, risk of birth
within 12-24 hours (with or without ROM)

See tocolysis (WICN) pathway

- Steroid administration 24 hours apart if condition allows (12 hours if clinically indicated) see pathway 6
- If not already on labour ward move to LW if birth felt to be likely
- Commence MgSO₄ bolus and follow with maintenance dose (>4 hours MgSO₄ optimal but may be of benefit if given for <4 hours)
- Discuss with neonatal team (and arrange transfer if required). If IUT required MgSO₄ continue until ambulance is ready for transfer, recommence at accepting unit after obstetric review
- Neonatal team to counsel woman and birth partners +/- tour of NNU if condition allows (this can be supported by Trust specific written information)
- Discuss with consultant, senior registrar to document discussion and plan of care (using BAPM extremes of viability form if required, detailing monitoring, mode of birth)
- Repeat doses may be given if birth does not occur, only require 1 loading dose in a 24 hour period

*Can consider MgSO₄ up to 34/40 following tripartite discussion)