COMPLICATIONS OF PREGNANCY

PRETERM LABOUR

NIFEDIPINE TOCOLYTIC THERAPY: LABOUR AND BIRTH SUITE – QUICK REFERENCE GUIDE

This Quick Reference Guide must be used in conjunction with its respective Clinical Guideline Section Pre term labour.

KEY WORDS
Preterm labour, nifedipine, contractions, dose, regimen

AIM
Early recognition of genuine preterm labour with prompt and appropriate management

See Clinical Guidelines Section P Medications Nifedipine for detailed information on this medication.

Unless contra-indicated the first line tocolysis to be used should be Nifedipine.¹

CONTRA-INDICATIONS TO THE USE OF NIFEDIPINE

- Cardiogenic shock
- Cardiac disease²
- Hypotension²
- Intrauterine infection²
- Intrauterine death²
- Antepartum haemorrhage
- Pre eclampsia
- Use with betamimetics, such as Salbutamol
- Contra-indications to any suppression of labour
- Concurrent use of rifampicin¹

PRECAUTIONS

- Congestive heart failure – use of nifedipine may precipitate or exacerbate heart failure³
- Magnesium sulphate (MgSO₄) therapy – nifedipine may increase the risk of hypotension.²
  
  Note: A woman treated with Nifedipine should NOT be given a bolus dose of MgSO₄.
- Enzyme inducing epileptic drugs e.g. carbamazepine, phenytoin, phenobarbitone may increase the metabolism of nifedipine.¹
PRIOR TO COMMENCEMENT OF NIFEDIPINE REGIMEN

1. Insert an intravenous cannula to provide access.
2. Perform baseline blood tests for:
   - urea and electrolytes (U&E’s) and creatinine
   - liver function tests (LFT’s)

REGIMEN

INITIAL DOSE
1. Administer 20mg Nifedipine orally (not slow release).¹
2. After 30 minutes, if the contractions persist, give another 20mg Nifedipine orally.¹
3. After another 30 minutes, if the contractions persist, give another 20mg Nifedipine orally.¹
4. After 3 hours if the contractions still persist, Nifedipine 20mg every 8 hours. The maximum daily dose should not exceed 140mg.

MAINTENANCE DOSE
A maintenance dose of 20mg three times per day for 48 hours may be given when indicated.

NOTE
- The maximum dose of Nifedipine is 140mg per day.¹
- Onset of tocolysis is at 30 to 60 minutes and institution of a second line of tocolysis should not be considered in the first 2 hours. If contractions do not abate after 2 hours a second line tocolysis may be considered by the obstetric consultant on call.
- The first 2 doses should be crushed or chewed to increase the rate of absorption.²

MATERNAL AND FETAL OBSERVATIONS
- Pulse, blood pressure and respirations:
  ➢ half hourly while the woman is contracting
- Continuous electronic fetal heart rate monitoring until the contractions cease.
- Maternal hypotension – treat with intravenous fluids in the first instance.

SIDE-EFFECTS
- Hypotension¹,³
- Dyspnoea³
- Cardiac failure
- Headache¹,³
- Nausea¹,³
- Dizziness¹,³
- Increase in liver enzymes³
- Tachycardia
- Facial flushing³
- Reflex tachycardia³

REFERENCES
