

Clinical Trial Protocol

Iranian Registry of Clinical Trials

13 Jun 2026

Comprasion of nifedipin versus magnesium sulfate in Treatment of preterm labor

Protocol summary

Summary

Preterm delivery is defined a birth occurring before 37 weeks of gestation or before 259 days from the last menstrual period and its incidence has increased during the last decade in most countries. Several drugs have been suggested for treatment of preterm labor but suitable and safe drug is not still available. The aim of this study is comparison of Nifedipin versus Magnesium Sulfate in treatment of preterm labor. 120 pregnant women in 24-34 gestational weeks who are admitted in Rohani Hospital of Babol because of preterm labor are randomly assigned to receive Magnesium Sulfate (n=60) or Nifedipine (n=60). Before enrolling in this study the informed consent from women is obtained. The first step of management is bed rest and hydration by 500cc infusion of ringer solution and 50 mg Pethedine IM for two groups. If contractions are continued all patients will receive Betamethasone 12mg IM twice, 24 hours apart and randomly receive either oral Nifedipine or intravenous Magnesium Sulfate. Demographic and obstetrics characteristics, maternal and fetus adverse effects, clinical assessment, time to failure of the treatment are record by questionnaire. Fetal distress and induced delivery are excluded from study.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201301281760N20**
Registration date: **2013-05-11, 1392/02/21**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2013-05-11, 1392/02/21

Registrant information

Name

Nargess Gholizadeh Pasha

Name of organization / entity

Fatemehzahra Infertility Reproductive Health Research Center, Babol University of Medical Sciences

Country

Iran (Islamic Republic of)

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+98 11 3236 2282

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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research and Technology, Babol University of Medical Sciences

Expected recruitment start date

2012-12-10, 1391/09/20

Expected recruitment end date

2013-12-22, 1392/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comprasion of nifedipin versus magnesium sulfate in Treatment of preterm labor

Public title

Comprasion of nifedipin versus magnesium sulfate in Treatment of preterm labor

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 24w-34w gestational age with a

diagnosis of preterm labor; at least four contractions [During the "30 in 20 minutes with increasing cervical dilatation and effacement] (2cm dilatation or effacement of 80%). Exclusion criteria: multiple pregnancies; chorioamnionitis; preeclampsia, abruption previa, liver disease, heart and blood pressure, maternal vaginal bleeding; IUGR; IUFD; Fetal distress, fetal major anomaly; PPROM; (PR > 100, BP < 90/50) ³ 5cm dilatation.

Age

From **18 years** old to **35 years** old

Gender

Female

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **120**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

The ethics committee of Babol University of Medical Sciences

Street address

Babol University of Medical Sciences, Ganjafroz Avenue

City

Babol

Postal code

Approval date

2012-12-09, 1391/09/19

Ethics committee reference number

1671

Health conditions studied

1

Description of health condition studied

preterm labor

ICD-10 code

O60

ICD-10 code description

Preterm labour and delivery

Primary outcomes

1

Description

Premature birth control

Timepoint

Before 37 weeks of gestation

Method of measurement

Clinical

Secondary outcomes

1

Description

Adverse effects of maternal magnesium sulfate versus nifedipine

Timepoint

Three days a week during the first 48 hours of onset of pain

Method of measurement

clinical

2

Description

Magnesium sulfate versus nifedipine complication rate of fetal tachycardia

Timepoint

Three days a week during the first 48 hours of onset of pain

Method of measurement

clinical

3

Description

The effect of nifedipine versus magnesium sulfate to stop the contractions of

Timepoint

Three days a week during the first 48 hours of onset of pain

Method of measurement

Clinical

Intervention groups

1

Description

Intervention : Patients in Nifedipine group will receive 10mg orally and follow every 20 minutes for total four doses and assess for blood pressure. Then received 20 mg orally every 6 hours until 24 hours and every 8 hours until next 24 hours.

Category

Treatment - Drugs

2

Description

Control: Patients in Magnesium Sulfate group will receive 4gr bolus and follow by 2gr/h infusion. All patient assess for urinary output, DTR, respiratory rate, The drug will continue until 12 hours after stopping of contractions.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Rouhani hospital

Full name of responsible person

Mahboubeh Ramzani

Street address

City

Babol

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research and Technology, Babol University of Medical Sciences

Full name of responsible person

Dr. Ali Bijani

Street address

Vice Chancellor for Research and Technology, Babol University of Medical Sciences, Gangafroz Avenue

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Vice Chancellor for Research and Technology, Babol University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Fatemehzahra Fertility & reproductive Health Reseach Center

Full name of responsible person

Nargess Gholizadeh Pasha

Position

MA/Responsible for Public Affairs of Research Center

Other areas of specialty/work

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

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Position

Gynecologist

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Web page address**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty