

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Jul 2026

Comparing the effect of repeated low dose and unique high dose sucrose with placebo (distilled water) on the control of pain secondary to retinopathy of prematurity examination of premature neonates

Protocol summary

Summary

Objectives; Comparing the effect of repeated low dose and unique high dose sucrose with placebo (distilled water) on the control of pain secondary to retinopathy of prematurity examination of premature neonates. Design; Placebo controlled, double-blinded, randomized study. Setting and conduct; Single center, in Istanbul, Turkey. Participants including major eligibility criteria; Premature neonates who underwent first retinopathy of prematurity examination, who did not have asphyxia, intraventricular hemorrhage, who were not resuscitated, who had congenital anomaly, who underwent invasive or noninvasive mechanical ventilation therapy during retinopathy of prematurity examination, and who take analgesia or sedative medicine. Intervention; Distilled water group, three repeated doses of 0.2 ml sucrose (24%) and single dose of 0.6 ml sucrose (24%) group. Main outcome measures: Primary outcome measure was the "Premature Infant Pain Profile" (PIPP), which includes assessment of facial expressions, heart rate, oxygen saturation and took behavioral state and gestational age into consideration. Secondary outcome measures were heart rate differences, desaturation, crying time and the degree of cry.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014122610279N4**
Registration date: **2015-01-26, 1393/11/06**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-01-26, 1393/11/06

Registrant information

Name

Ozge Serce Pehlevan

Name of organization / entity

Zeynep Kamil Maternity and Children Education and Training Hospital

Country

Turkey

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Recruitment status

Recruitment complete

Funding source

None

Expected recruitment start date

2010-12-01, 1389/09/10

Expected recruitment end date

2011-08-31, 1390/06/09

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the effect of repeated low dose and unique high dose sucrose with placebo (distilled water) on the control of pain secondary to retinopathy of prematurity examination of premature neonates

Public title

Sucrose role in the pain control during eye examination

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria; 1. Premature neonates who underwent first retinopathy of prematurity examination Exclusion criteria; 1. Invasive or noninvasive mechanical ventilation therapy during retinopathy of prematurity examination. 2. Neonates who take analgesia, sedative medicine. 3. Asphyxia 4. Intraventricular hemorrhage 5. Neonates who were resuscitated 6. Neonates who had congenital anomaly

Age

From **28 days** old to **2 months** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **64**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Neonates were divided by three group; group 1 (Placebo group): Neonates who were given 0.2 ml distilled water 2 minutes before, during, and after the procedure by 2 minutes interval (n= 21); group 2: Neonates who were given 0.2 ml 24% sucrose 2 minutes before, during, and after the procedure (n= 22); group 3: Neonates who were given 0.6 ml 24% sucrose 2 minutes before the procedure (n= 21). Neonates were randomly assigned to one of three treatment groups, using a computer generated randomization programme. The packed colorless study solutions were provided by the pharmacy in sealed envelopes to the patient's nurse 3 minutes before the examination. The nurse, ophthalmologist, and investigators and the parents were blinded to the group assignment. Tropicamide (0.5%) and fenilefrin HCL were dropped to the eyes 2 times (10 minute interval) 60 minutes before eye examination, and local anesthetic medicine (Proparacaine; Alcaine drop 0.5%) were dropped to the eyes 30 minutes before the examination. Each neonate was equipped with an oxisensor connected to a Nelcor pulse oximeter (Ovidien RMS).

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ministry of Health of Turkey, General Directorate of

Pharmaceuticals and Pharmacy

Street address

No:5, 2176 Sok., Söğütözü Mah

City

Ankara

Postal code

06520

Approval date

2010-12-27, 1389/10/06

Ethics committee reference number

19216

Health conditions studied

1

Description of health condition studied

Retinopathy of prematurity

ICD-10 code

H35-1

ICD-10 code description

Retinopathy of prematurity

Primary outcomes

1

Description

Premature infant pain scale (PIPP)

Timepoint

30th and 60th second, 2nd minute for both eye examination, also 4th minute for right eye examination

Method of measurement

Video records

Secondary outcomes

1

Description

Frequency of tachycardia (>180 bpm)

Timepoint

30th and 60th second, 2nd minute for both eye examination, also 4th minute for right eye examination

Method of measurement

Video records

2

Description

Frequency of bradycardia (<100 bpm)

Timepoint

30th and 60th second, 2nd minute for both eye examination, also 4th minute for right eye examination

Method of measurement

Video records

3

Description

Desaturation (<85% for 10 second)

Timepoint

30th and 60th second, 2nd minute for both eye examination, also 4th minute for right eye examination

Method of measurement
Video records

4

Description

Crying time

Timepoint

30th and 60th second, 2nd minute for both eye examination, also 4th minute for right eye examination

Method of measurement

Video records

5

Description

Degree of cry

Timepoint

30th and 60th second, 2nd minute for both eye examination, also 4th minute for right eye examination

Method of measurement

Video records

Intervention groups

1

Description

Group 1(Placebo group): Neonates who were given 0.2 ml distilled water 2 minutes before, during, and after the procedure by 2 minutes interval

Category

Placebo

2

Description

Group 2: Neonates who were given 0.2 ml 24% sucrose 2 minutes before, during, and after the procedure

Category

Other

3

Description

Group 3: Neonates who were given 0.6 ml 24% sucrose 2 minutes before the procedure

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Zeynep Kamil Maternity and Children's Education and Training Hospital

Full name of responsible person

Guner Karatekin

Street address

No:3-4, Dr. Burhanettin Ustünel Sok., Zeynep Kamil Mah.

City

Istanbul

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Ministry of Health of Turkey, General Directorate of Pharmaceuticals and Pharmacy

Full name of responsible person

Cem Razi

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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

Ministry of Health of Turkey, General Directorate of Pharmaceuticals and Pharmacy

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

Zeynep Kamil Maternity and Children's Education and Training Hospital

Full name of responsible person

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Position

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Other areas of specialty/work

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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