Kangaroo mother care combined with sucrose to reduce pain responses in preterm infants

| Submission date 01/10/2009 | Recruitment status No longer recruiting | Prospectively registered Protocol |
|-------------------------------|---|--|
| Registration date | Overall study status | Statistical analysis plan |
| 20/07/2010 | Completed | [_] Results |
| Last Edited | | [_] Individual participant data |
| | | [] Record updated in last year |
| | | |

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s) Scientific

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers N/A

Study information

Scientific Title

The efficacy of kangaroo mother care combined with oral sucrose to reduce pain responses in preterm infants: a randomised multicentre clinical trial

Study objectives

1. Is kangaroo mother care combined with sucrose more effective than sucrose alone in reducing the pain responses of preterm infants during venipuncture?

2. How do mothers perceive doing kangaroo care while their infant is having a venipuncture?

Although kangaroo care is effective in reducing the pain responses of preterm infants to procedural pain, the perceptions of mothers of holding their infant skin-to-skin during venipuncture has not been explored.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Local ethics committees: 1. Comissão de Ética para a Saúde dos Hospitais da Universidade de Coimbra approved on the 9th June 2006 2. Comissão de Ética do Centro Hospitalar de Coimbra approved on the 23rd May 2006

Study design

Multicentre randomised controlled clinical trial

Primary study design Interventional

Secondary study design Randomised controlled trial

Study setting(s)

Hospital

Study type(s) Treatment

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Procedural pain during venipuncture

Interventions

1. Oral sucrose with pacifier, 2 minutes before venipuncture

2. Kangaroo mother care during 30 minutes before and during venipuncture plus oral sucrose with pacifier 2 minutes before venipuncture

Infants were followed until discharge from hospital.

Intervention Type

Other

Phase Not Applicable

Primary outcome measure

Pain responses measured by:

- 1. Premature Infant Pain Profile Scores
- 2. Changes in heart rate
- 3. Changes in oxygen saturation
- 4. Changes in behavioural state
- 5. Percentage of time displaying facial actions
- 6. Heart rate variability

7. Recovery time

Primary outcome measures were taken at baseline (30 seconds before venipuncture); during skin cleansing; needle stick and blood harvesting; compression after needle removal; and rest (up to 5 minutes after the end of the procedure).

Secondary outcome measures

Mothers' perception of doing Kangaroo Care during venipuncture was obtained between one and six days after the venipuncture occurred.

Overall study start date 25/03/2007

Completion date 01/09/2008

Eligibility

Key inclusion criteria

1. Gestational age between 28 and 36 weeks

2. Postnatal age less than 28 days

Participant type(s) Patient

Age group Neonate

Sex Both

Target number of participants 120

Key exclusion criteria

1. Apgar score less than 6 at 5 minutes

2. Surgery

3. Major congenital anomalies

4. Genetic anomaly

5. Intra-ventricular haemorrhage (IVH) greater than Grade 2 or subsequent periventricular leucomalacia

6. Severe illness as defined by hypo or hyperthermia, need for respiratory support (ventilation or nasal continuous positive airway pressure [CPAP]), inotropic therapy

- 7. Presence of umbilical catheter
- 8. Painful procedure in the previous 12 hours
- 9. Opioid or non-opioid sedation on the 48 hours prior to data collection
- 10. Diabetic mother
- 11. Mother with history of substance abuse
- 12. Mother absent or unable to do kangaroo care for clinical reasons
- 13. Mother cannot speak/read Portuguese

Date of first enrolment

25/03/2007

Date of final enrolment

01/09/2008

Locations

Countries of recruitment Portugal

Study participating centre Praceta Falcão Resende, 1, R/Ch Coimbra Portugal 3000-164

Sponsor information

Organisation

Nursing School of Coimbra (Escola Superior de Enfermagem de Coimbra) (Portugal)

Sponsor details

Av. Bissaya Barreto Apartado 55 Coimbra Portugal 3001-901 +351 (0)239 487 200 esenfc@esenfc.pt

Sponsor type

University/education

Website http://www.esenfc.pt

ROR https://ror.org/03c3y8w73

Funder(s)

Funder type Government

Funder Name Foundation for Science and Technology (Fundação para a Ciência e a Tecnologia [FCT]) (Portugal)

Alternative Name(s)

Foundation for Science and Technology, Portuguese Science and Technology Foundation, Fundacao para a Ciencia e a Tecnologia, FCT

Funding Body Type Government organisation

Funding Body Subtype National government

Location Portugal

Funder Name Nursing School of Coimbra (Escola Superior de Enfermagem de Coimbra) (Portugal)

Results and Publications

Publication and dissemination plan Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration