

Clinical Trial Protocol

Iranian Registry of Clinical Trials

30 Jul 2026

The effect of umbilical cord milking on neonatal outcome in preterm infants

Protocol summary

Summary

The objective of this interventional study is to compare the neonatal outcomes between the infants with milked umbilical cord and infants without it, 80 pregnant women with a gestational age of 28-34 weeks who were admitted for normal delivery or cesarean section at Shariati Hospital of Bandar Abbas and they lacked the exclusion criteria (Cord less than 25 cm; Vigorous or Meconiumstain; Motility, ABO or Rh negative mother; Congenital major anomalies; Umbilical cord prolapse; Phytoplasmic hydrops; Placenta; Placental decompression; true umbilical knot and maternal diseases such as maternal diabetes mellitus; maternal hypertension) were randomly divided into two groups. In group 1, after delivery by natural delivery the baby is positioned at the uterus and in delivery by cesarean section along the thigh. Immediately the umbilical cord will be disconnected 25 cm from the navel surface and placed under the Warmer, then the umbilical cord Raised and taken three times at the cut off end at the speed of 10 cm / s to the baby's side, and will eventually be cut from the distance of 2 cm above the navel get clamped and will be cut off. In group 2, after delivery by natural delivery the baby is positioned at the uterus and in delivery by cesarean section along the thigh and the cord is cut off without dipping. It is then compared for neonatal outcomes including birth hemoglobin and hematocrit, Neonatal hypertension, respiratory distress, jaundice requiring phototherapy, IVH, Hypercalcemia, and volume of injected blood.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017072031697N1**

Registration date: **2017-08-27, 1396/06/05**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2017-08-27, 1396/06/05

Registrant information

Name

Afshin Parvizpanah

Name of organization / entity

Hormozgan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 76 3333 6625

Email address

afshin.parvizpanah@hums.ac.ir

Recruitment status

Recruitment complete

Funding source

Hormozgan University of Medical Sciences

Expected recruitment start date

2014-03-21, 1393/01/01

Expected recruitment end date

2015-03-20, 1393/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of umbilical cord milking on neonatal outcome in preterm infants

Public title

The effect of umbilical cord milking on neonatal outcome in preterm infants

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: All pregnant women 28 to 34 weeks of gestation (based on the first trimester ultrasonography of pregnancy). Exclusion criteria: Short cord (less than 25 cm); Vigorous or meconium stained; congenital major anomalies; Umbilical cord prolapse; Phytoplasmic hydrops; multiple pulmonary deliveries; maternal ABO or negative Rh mother; mothers with placenta and decollete pair; mothers Abnormal umbilical cord such as a true knot; mothers with underlying illnesses; Such as diabetes and high blood pressure; Not being a resident of Hormozgan or lack of follow-up.

Age

No age limit

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 80

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Hoemozgan University of Medical Sciences

Street address

Shahid Mohammadi Hospital, Jomhourī Islami St,
Imam Khomeini Blvd

City

Bandar Abbas

Postal code

Approval date

2013-12-22, 1392/10/01

Ethics committee reference number

HUMS.REC.1394.009

Health conditions studied

1

Description of health condition studied

Preterm infant

ICD-10 code

P07.30

ICD-10 code description

Preterm newborn, unspecified weeks of gestation

Primary outcomes

1

Description

Hemoglobin premature infants

Timepoint

48 hours after birth

Method of measurement

According to the results reported by the laboratory of Shariati Hospital and expressed in grams per liter of blood.

Secondary outcomes

1

Description

Intrauterine pulmonary edema

Timepoint

After birth

Method of measurement

Intravenous hemorrhage of the baby, expressed on the basis of sonography.

2

Description

Infant hematocrit

Timepoint

48 hours after birth

Method of measurement

Based on the results reported by Shariati Hospital's laboratory, it is expressed in terms of percentage and number.

3

Description

Primary neonatal hypertension

Timepoint

After birth

Method of measurement

Based on the report reported by Shariati Hospital's laboratory based on mmHg and with the number.

Intervention groups

1

Description

In case group, after delivery by natural delivery the baby is positioned at the uterus and in delivery by cesarean section along the thigh. Immediately the umbilical cord will be disconnected 25 cm from the navel. The baby will be placed underneath the warmer and the umbilical cord

was raised, 3 times from the cut off end at the speed of 10 centimeters per second toward the infant, and finally, 2 cm above the navel, the umbilical cord is clamped and cut off.

Category

Treatment - Surgery

2**Description**

In the control group, after delivery by natural delivery the baby is positioned at the uterus and in delivery by cesarean section along the thigh. Immediately the umbilical cord will be disconnected 25 cm from the navel surface and placed under the Warmer, and the umbilical cord is removed from the spacing 2 cm above the navel, get clamped and will cut off.

Category

Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

Shariati Hospital

Full name of responsible person**Street address****City**

Bandar Abbas

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Hoemozgan University of Medical Sciences

Full name of responsible person

Teamour Aghamolai

Street address

Shahid Mohammadi Hospital, Jomhouri Islami St,
Imam Khomeini Blvd

City

Bandar Abbas

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Hoemozgan 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**

Hoemozgan University of Medical Sciences

Full name of responsible person

Parvaneh Heidari

Position

Gynecologist

Other areas of specialty/work**Street address**

Khalij-e-Fars Hospital

City

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+98 76 3333 6625

Fax**Email**

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Web page address**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Hoemozgan University of Medical Sciences

Full name of responsible person

Parvaneh Heidari

Position

Gynecologist

Other areas of specialty/work**Street address**

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Postal code**Phone**

+98 76 3333 6625

Fax**Email**

afshinpgp@gmail.com

Web page address**Person responsible for updating data****Contact****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