

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Is "delayed umbilical cord clamping" beneficial for premature newborns?

Protocol summary

Summary

The appropriate moment for clamping the umbilical cord is controversial. Immediate cord clamping (ICC) is an item of active management of the third stage of labor (AMTSL). Unclamped umbilical cord may cause inconvenience in preterm neonates because they commonly need some levels of emergent services. Some studies revealed delayed cord clamping (DCC) of preterm neonates results in better health conditions like lower rates of RDS, less morbidities in labor room and lower risk of postpartum hemorrhage. In this single-center randomized control trial (RCT) study, Sixty premature neonate (gestational age ≤ 34 weeks) were randomly assigned to delayed clamping (45 sec. after delivery) or early clamping (below 10 sec. after delivery), and followed up in NICU. Primary outcomes were 1st and 5th minute APGAR score, Intra ventricle hemorrhage and need some levels of resuscitation.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015013010026N5**

Registration date: **2015-02-14, 1393/11/25**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2015-02-14, 1393/11/25

Registrant information

Name

Amir mohammad Armanian

Name of organization / entity

Isfahan University of Medical Sciences

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Isfahan University of Medical Sciences

Expected recruitment start date

2015-02-05, 1393/11/16

Expected recruitment end date

2015-06-29, 1394/04/08

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Is "delayed umbilical cord clamping" beneficial for premature newborns?

Public title

Is "delayed umbilical cord clamping" beneficial for premature newborns?

Purpose

Prevention

Inclusion/Exclusion criteria

infants with gestational age of ≤ 34 weeks and admitted to the tertiary referral NICUs of the Isfahan University of Medical Sciences at Alzahra and Shahid Beheshti Hospitals, were eligible for participation in the study. Infants who had major congenital anomalies, asphyxia, congenital cyanotic heart disease were excluded.

Age

No age limit

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: 60

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Isfahan University of Medical Sciences

Street address

Isfahan University of Medical Sciences, Hezarjerib st.

City

Isfahan

Postal code

Approval date

2013-09-23, 1392/07/01

Ethics committee reference number

292270

Health conditions studied

1

Description of health condition studied

clamping the umbilical cord

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Time of umbilical cord clamping

Timepoint

After birth

Method of measurement

Time

Secondary outcomes

1

Description

1 & 5 min Apgar score

Timepoint

After birth

Method of measurement

Apgar score

2

Description

Hematocrit

Timepoint

After birth

Method of measurement

Blood sample

3

Description

Blood transfusion

Timepoint

During Hospitalization time

Method of measurement

Daily recorded sheets

4

Description

IVH, PDA

Timepoint

During Hospitalization time

Method of measurement

Daily recorded sheets

5

Description

Mortality

Timepoint

During hospitalization time

Method of measurement

Daily recorded sheets

6

Description

Sepsis

Timepoint

During Hospitalization time

Method of measurement

Daily recorded sheets

7

Description

Neonatal resuscitation

Timepoint

After birth

Method of measurement

Daily recorded sheets

Intervention groups

1

Description

Delayed clamping group, preterm neonates (≤ 34 weeks' gestation) after delivery routine conducted in 45 seconds (DCC)

Category

Other

2

Description

Preterm neonates (≤ 34 weeks' gestation) after delivery routine conducted in 10 seconds(ICC)

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

NICU at Alzahra and Shahid Beheshti hospitals in Isfahan IRAN

Full name of responsible person

Dr. Amir Mohammad Armanian

Street address

number 133, Shahid Ansari alley, Saeb street, Isfahan, Iran

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Isfahan University of Medical Sciences

Full name of responsible person

Ddr Siavash

Street address

Faculty of Medicine, Isfahan University of Medical Sciences, Hezar-Jerib St.,

City

Isfahan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Isfahan 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

Isfahan University of Medical Sciences

Full name of responsible person

Dr. Maryam Ansari

Position

MD, ob & gyn resident

Other areas of specialty/work

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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