Intrauterine pressure monitoring for augmentation or induction of labour with intravenous oxytocin: benefits and costs

Submission date Recruitment status Prospectively registered 20/12/2005 No longer recruiting [] Protocol [] Statistical analysis plan Registration date Overall study status 20/12/2005 Completed [X] Results [] Individual participant data Last Edited Condition category Pregnancy and Childbirth 29/01/2010

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr J.J.H. Bakker

Contact details

Academic Medical Centre (AMC)
Department of Obstetrics and Gynaecology, H3-107
Meibergdreef 9
Amsterdam
Netherlands
1100 DD
j.j.bakker@amc.uva.nl

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

NTR285

Study information

Scientific Title

To evaluate the effectiveness of the use of an IntraUterine Pressure Catheter (IUPC) in comparison to external monitoring of uterine activity during (I) augmentation after arrest of labor, or (II) induction of labour with intravenous oxytocin. Does the potentially more accurate monitoring of uterine activity with IUPC lead to a better outcome of labour and delivery in a study that randomises the use of an IUPC?

Acronym

The IUPC study

Study objectives

Our hypothesis is that use of an intrauterine pressure catheter (IUPC), during augmentation or induction of labour with intravenous oxytocin, will reduce the number of instrumental deliveries from 25% to 16%.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Received from the local medical ethics committee

Study design

Multicentre, randomised, single-blind, active controlled, parallel group trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Pregnancy, labour

Interventions

Intrauterine pressure monitoring with a catheter during labour versus external uterine activity monitoring (control group).

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Oxytocin

Primary outcome measure

The number of instrumental deliveries, i.e. caesarean sections and/or assisted vaginal delivery.

Secondary outcome measures

- 1. The occurrence of neonatal admittance to Neonatal Intensive Care Unit (NICU)
- 2. Need for antibiotics by mother or child
- 3. Total amount of oxytocin used
- 4. Complications
- 5. Time to delivery and costs

Overall study start date

01/07/2004

Completion date

01/07/2007

Eligibility

Key inclusion criteria

Women with the indication to induce labour or to stimulate the contractions with intravenous oxytocin in case of arrest of labour.

Participant type(s)

Patient

Age group

Adult

Sex

Female

Target number of participants

1350

Key exclusion criteria

- 1. Women with a history of caesarean section
- 2. Gestational age less than 36 weeks
- 3. Intrauterine foetal death
- 4. Breech presentation
- 5. Multiple pregnancy
- 6. Maternal age greater than 18 years
- 7. Human immunodeficiency virus (HIV) or hepatitis B infection

- 8. Intrauterine infection
- 9. Contraindication for amniotomy
- 10. Participation in another randomised controlled trial

Date of first enrolment

01/07/2004

Date of final enrolment

01/07/2007

Locations

Countries of recruitment

Netherlands

Study participating centre Academic Medical Centre (AMC)

Amsterdam Netherlands 1100 DD

Sponsor information

Organisation

Academic Medical Centre (AMC) (Netherlands)

Sponsor details

Department of Obstetrics and Gynaecology Meibergdreef 9 Amsterdam Netherlands 1105 AZ

Sponsor type

Hospital/treatment centre

Website

http://www.amc.uva.nl/

ROR

https://ror.org/03t4gr691

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Academic Medical Centre (AMC) (Netherlands)

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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	28/01/2010		Yes	No