

Comparing combined perineal massage and warm compress versus perineal massage during the second stage of labour in nulliparous women

Submission date 27/05/2019	Recruitment status No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 12/06/2019	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 11/06/2019	Condition category Pregnancy and Childbirth	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Vaginal birth can be associated with perineal tears and can be associated with both short and long-term morbidities eg pain, dyspareunia, bleeding and prolong recovery and nulliparous (no previous childbirth) women are at increased risk for perineal tear compared to multiparous (previously given birth) women.

Available techniques to prevent tears during the second stage of labour include perineal massage and warm compress, which have shown a reduction in perineal trauma. Thus this study was done to evaluate the effects of combined perineal massage and warm compression versus perineal massage alone during the active second stage of labour with the need for suturing of perineal trauma at vaginal birth.

Who can participate?

Nulliparous woman presenting in labour with presumed labour with age > 18 years old however the final recruitment only when patient achieve active second stage.

What does the study involve?

Participants will receive usual care during labour until the patient starts to push, then actual intervention will be started. Final eligibility for study entry of those recruited is only fulfilled when the woman in the second stage and about to commence pushing. Only at this point is a sealed envelope assigned and subsequently opened to decide the intervention to be carried out. The intervention will either be perineal massage alone or combined perineal massage with warm compression.

What are the possible benefits and risks of participating?

Both interventions are safely used during the second stage of labour

Where is the study run from?

University Malaya Medical Centre, Malaysia

When is the study starting and how long is it expected to run for?
June 2019 to December 2019

Who is funding the study?
Investigator funded

Who is the main contact?
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Contact information

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Scientific

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number

Nil known

Study information

Scientific Title

Combined perineal massage and warm compress versus perineal massage during second stage in nulliparous - randomized control trial

Study objectives

Combine warm compress and perineal massage compared to perineal massage alone in nulliparous woman during second stage should result in less perineal suturing

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 29/04/2019 Medical research Ethics Committee, University Malaya Medical Centre (Pusat Perkhidmatan Penyelidikan (PPP), Tingkat 2, Institut Pengurusan & Perkhidmatan Penyelidikan (IPPP), University of Malaya, 50603, Kuala Lumpur, Malaysia; 03-79677022 (ext : 2369); umrec@um.edu.my), ref: 201926-7105

Study design

Single centre randomised controlled trial

Primary study design

Interventional

Study type(s)

Other

Health condition(s) or problem(s) studied

Nulliparous women in the second stage of pregnancy

Interventions

This is a randomised control trial involving nulliparous patient at term (>_37 weeks) who are admitted to an antenatal ward or labour ward of UM Hospital. Eligible patients will be identified using eligibility form and patient information sheet will be provided for those who fulfilled initial eligible criteria. Those who agreed to participate will be asked to provide written consent and will be recruited in this study.

Participants will receive usual care during labour until the patient starts to push, then actual intervention will be started. Final eligibility for study entry of those recruited is only fulfilled when the woman in the second stage and about to commence pushing. Only at this point is sealed number of envelope assigned and subsequently opened for the intervention to be carried out. Intervention will either be perineal massage alone or combine perineal massage with warm compression.

Perineal massage will be performed during contractions. A generous quantity of the KY-jelly will be poured onto fingers and using a gentle, slow massage, with 2 fingers of the gloved hand moving from side to side just inside the patient's vagina. Mild, downward pressure (towards the rectum) is applied with steady, lateral strokes, which last 1 second in each direction. Pressure

will be maintained at an intensity at which the woman did not feel any pain.

A warm compress will be applied between contractions. A sterile towel will be soaked in metal container filled with warm water (~50C) and squeezed before being placed gently on the perineum during each uterine contraction. The temperature should range from 38C to 44C during its application. During contractions, the towel should be re-soaked in the water to maintain warmth then reapplied again once the contraction is over. The water in the metal container will be replaced every 15 minutes until delivery or if the temperature dropped below 45C. The water temperature will be checked with a thermometer placed into the container. Total duration of treatment will be during the second stage only. Patient will be followed up soon after delivery for the outcomes.

Intervention Type

Procedure/Surgery

Primary outcome(s)

Requirement for suturing for perineal injury (Episiotomy / spontaneous tears) measured after delivery.

Key secondary outcome(s)

Maternal outcomes

1. Interval from intervention to delivery
2. Mode of delivery: Vaginal delivery / Operative vaginal delivery / caesarean delivery
3. Indication for operative vaginal delivery/caesarean section
4. Perineal status: Intact, 1st degree, 2nd degree, 3rd degree, 4th degree tear
5. Maternal satisfaction with intervention (rate 1 - 10)
6. Estimated blood loss at delivery

Fetal outcomes

1. Apgar score at 1 min and 5 min
2. Birth weight
3. Arterial cord pH
4. Reason and location of neonatal admission and indication

Completion date

07/12/2019

Eligibility

Key inclusion criteria

- 1 Initial recruitment: Presumed labour / Final recruitment: During active second stage
- 2 Nulliparous and no previous pregnancy beyond 20 week
3. Age of > 18
4. Gestational age of > 37 weeks at enrolment confirmed by ultrasound greater or less than 20 week
5. Singleton pregnancy
6. Planned vaginal birth
7. Cephalic presentation

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Female

Key exclusion criteria

1. Has performed antenatal perineal massage
2. Gross fetal anomaly
3. Gross perineal scarring (e.g. female genital mutilation)
4. Caesarean section (post-randomisation exclusion)

Date of first enrolment

14/06/2019

Date of final enrolment

07/12/2019

Locations**Countries of recruitment**

Malaysia

Study participating centre

University Malaya Medical Centre

Jalan Universiti

Lembah Pantai

Kuala Lumpur

Malaysia

50603

Sponsor information**Organisation**

University Malaya Medical Centre

ROR

<https://ror.org/00vkrxq08>

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

All data generated or analysed during this study will be included in the subsequent results publication

IPD sharing plan summary

Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes