Prevention of stretch marks in pregnancy: a pilot trial

Submission date 03/07/2017	Recruitment status Stopped	[X] Prospectively registered[X] Protocol		
Registration date	Overall study status Stopped Condition category Pregnancy and Childbirth	Statistical analysis plan		
14/07/2017		Results		
Last Edited		Individual participant data		
14/02/2020		 Record updated in last year 		

Plain English summary of protocol

Background and study aims

Stretch marks affect many women during pregnancy, particularly in the third trimester. They affect between 50% and 90% of women and are most commonly found during a first pregnancy. They appear as red lines or streaks that fade slowly after the pregnancy to leave pale lines on the skin. Areas of the body frequently affected are the abdomen, breasts, thighs and buttocks. They are reported as affecting women's perception of themselves. Further their prevention is important to women, and women frequently ask how they can be prevented during pregnancy. There is a lack of research on the prevention of stretch marks and there is a need for large studies to investigate how effective some of the products used by women are. The aim of this study is to examine the feasibility of undertaking a larger trial to evaluate the effects of a moisturising oil on the prevention and reduction of stretch marks in pregnancy, which has not being done to date.

Who can participate?

Women aged 18 and older who are around 12-16 weeks pregnant (with one baby).

What does the study involve?

Participants are randomly allocated to one of two groups. Those in the first group are asked to apply around 2 ml (about two pumps) of the plain moisturising oil daily to their abdomen after showering, from when they join the study until 38-41 weeks of pregnancy. Those in the second group are asked not to apply any treatment or skin product to their abdomen during pregnancy. Participants are asked to keep diaries of the application as appropriate. Participants receive two weekly text messages to remind them of their participation. Those in the first group are asked to bring their empty oil bottles to an interview at 38-41 weeks of pregnancy. Participants undergo health questions and are measured for weight at the start of the study and at the final assessment between 38-41 weeks of pregnancy.

What are the possible benefits and risks of participating? There are no direct benefits or risks of participating.

Where is the study run from?
University Hospital Galway (Ireland)

When is the study starting and how long is it expected to run for? September 2015 to April 2019

Who is funding the study? Investigator imitated and funded (Ireland)

Who is the main contact? Ms Miriam Brennan

Contact information

Type(s)

Scientific

Contact name

Ms Miriam Brennan

Contact details

School of Nursing & Midwifery Aras Moyola National University of Ireland Galway Galway Ireland H91 TK33

Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Prevention of striae gravidarum: a pilot trial

Study objectives

The aim of the study is to evaluate the feasibility of conducting a randomised controlled trial to evaluate the effectiveness of a moisturising oil (commercially available moisturising oil) compared to no treatment for the prevention and reduction in severity of striae gravidarum.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Galway Clinical Research Ethics Committee for University College Hospital Galway, 08/06/2017, ref: C.A.1770-Prevention of Striae Gravidarum: A Pilot Trial

Study design

Single-centre two arm unblinded pragmatic parallel randomised trial

Primary study design

Interventional

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Striae gravidarum

Interventions

Participants are randomly allocated to either the intervention or the control group using a 1:1 randomisation ratio using random block sizes.

Intervention group: Participants receive a moisturising oil (commercially available moisturising oil). They are asked to apply approximately 2 ml per day (two pumps of oil) to their abdominal skin over 26 weeks of their pregnancy (i.e. between 12-14 weeks up to approximately 38 weeks gestation) (updated 16/07/2018: between 12-16 weeks up to approximately 38 weeks gestation)

Control group: Participants do not receive any treatment.

Participants are asked to keep diaries of the application as appropriate. Participants receive two weekly text messages to remind them of their participation. Those in the intervention group are asked to bring their empty oil bottles to an interview at 38-41 weeks of pregnancy.

Participants are followed up at 38-41 weeks of gestation to see if the study is feasible and to assess their level of striae gravidarum. They undertake assessment interviews at this time and are measured for weight.

Intervention Type

Other

Primary outcome(s)

- 1. Number and proportion of women who are recruited, enrolled, complete the study and adhere to the intervention and control guidelines is measured using trial register form and outcomes assessment form, at enrolment (12-14 weeks gestation; updated 16/07/2018: 12-16 weeks gestation) and outcomes assessment interview (38-41 weeks gestation)
- 2. Percentage of potentially eligible women who are recruited/enrolled to the study is measured using trial register form at enrolment
- 3. Challenges with the randomisation process is reported based on the researcher's notes at the enrolment/randomisation stage
- 4. Number and proportion of women who withdraw, drop out or deviate from the protocol guideline is measured using the outcome assessment form at 38-41 weeks gestation
- 5. Reasons for non-recruitment, non adherence, or attrition is measured using the Trial register form and Outcome assessment form at enrolment (12-14 weeks gestation; updated 16/07/2018:
- 12-16 weeks gestation) and outcomes assessment interview (38-41 weeks gestation)
- 6. Women's rating of the tolerability/acceptability and effectiveness of the intervention is measured using a rating scale at 38-41 weeks of pregnancy
- 7. Completeness of data collection for outcomes is measured using % of missing data at outcomes assessment (38-41 weeks gestation)
- 8. Challenges with data analysis is reported based on the researchers study notes at the analyses stage

- 9. Number and proportion of women developing striae gravidarum in the intervention and control group is measured using the Davey instrument (1972) at 38-41 weeks
- 10. Number and proportion of women developing mild, moderate or severe striae gravidarum is measured using Classification system of mild, moderate or severe at 38-41 weeks
- 11. Women's perception of the severity of striae gravidarum is measured using a grading system of none, mild, moderate or severe at 38-41 weeks

Key secondary outcome(s))

Infant's birth gestation and infant weight is measured using number of weeks at birth & Kg recorded in the mother's notes at time of birth.

Completion date

30/04/2019

Reason abandoned (if study stopped)

Participant recruitment issue

Eligibility

Key inclusion criteria

- 1. Primigravid women
- 2. Singleton pregnancy
- 3. 12-14 weeks gestation at time of recruitment; updated 13/07/2018: 12-16 weeks gestation at time of recruitment
- 4. Absence of abdominal striae
- 5. Aged 18 or over at recruitment
- 6. English speaking women

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Female

Key exclusion criteria

- 1. Multigravid women (due to risk of having striae from an earlier pregnancy)
- 2. Women taking corticosteroids for any reason (due to their association with skin striae)
- 3. Multiple pregnancy (due to increased maternal weight gain and skin stretching)
- 4. Women with a known hypersensitivity to agents in baby oil (due to risk of allergic reaction)
- 5. Women with known disorders or illnesses that may be associated with striae, e.g., Marfan syndrome, Cushing syndrome

- 6. Women who decline to discontinue other creams or lotions
- 7. Women who are unable to give informed consent

Date of first enrolment

17/07/2017

Date of final enrolment

31/08/2018

Locations

Countries of recruitment

Ireland

Study participating centre University Hospital Galway

Maternity Unit Newcastle Road Galway Ireland H91 YR71

Sponsor information

Organisation

National University of Ireland Galway

ROR

https://ror.org/03bea9k73

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Miriam Brennan (Miriam.brennan@nuigalway.ie)

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient- facing?
Protocol article	protocol	12/10 /2018		Yes	No
Other publications	qualitative study of the factors influencing recruitment	12/02 /2020	14/02 /2020	Yes	No
Participant information sheet	Participant information sheet	11/11 /2025	11/11 /2025	No	Yes