

Postnatal intervention for women with a history of gestational diabetes mellitus

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		<input type="checkbox"/> Protocol
Registration date 14/06/2013	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
Last Edited 07/01/2019	Condition category Pregnancy and Childbirth	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

Diabetes which first presents during pregnancy [Gestational Diabetes Mellitus (GDM)] is increasingly common and now affects around 15% of pregnant women. It is a condition in which blood sugar levels are higher than normal and is usually diagnosed by an oral glucose tolerance test around 28 weeks gestation. Women with previous GDM have a 50% risk of developing it again in any future pregnancy, and 20% of women will develop type 2 diabetes within the next 10 years. However, there is good evidence that lifestyle changes, including weight management, can prevent or delay the development of type 2 diabetes in people at high risk, such as women with previous GDM. The postnatal period (shortly after pregnancy) is an ideal time for women to make these changes to help prevent weight gain between pregnancies and generally reduce their risk of future type 2 diabetes. Unfortunately, after having a baby, mothers have many demands on their time, often to the neglect of their own health. This study is designed to determine if a postnatal lifestyle intervention to encourage weight loss is both feasible and acceptable among women with previous gestational diabetes.

Who can participate?

Women aged 18 years or older who had a body mass index greater than 25 (overweight or obese) at their pregnancy booking appointment, and who were subsequently diagnosed with GDM.

What does the study involve?

Participants will be asked to attend two study visits 6 months apart. The first of these will coincide with their routine postnatal oral glucose tolerance test (OGTT). Each participant will be asked to complete some questionnaires about their general health, wellbeing and about their levels of physical activity, have a blood test and have some anthropometric measurements (weight, height, waist, hip circumference). Each participant will then be randomly allocated either to the PAIGE lifestyle intervention programme (PAIGE group) or to receive standard lifestyle advice (control group). Those randomised to the PAIGE group, will receive a 1 hour educational session during their routine OGTT clinic visit. In addition, participants will be given a pedometer as a motivational tool to increase physical activity, and offered free referral to a commercial weight management organisation (CWMO) for 12 weeks. The PAIGE team will contact participants from time to time over the 6 months of the study, to provide help and

support as required for successful weight loss and increasing physical activity. Participants allocated to the control group will receive standard lifestyle advice about healthy eating and increasing physical activity). The control group will be offered the free 12 week referral to the CWMO at the end of the study. This randomisation will allow us to compare the results of the two different groups to see if the intervention is better at helping women to achieve weight loss than standard care alone. For both groups, Visit 2 will take place at the hospital after 6 months. At this visit we will repeat the weight measurements, and carry out the same blood tests as at the start of the study. Participants will be asked to complete the same questionnaires as at visit 1.

What are the possible benefits and risks of participating?

The study is designed to help women who have a history of GDM, and who are overweight, adopt a healthy lifestyle, lose weight and reduce their risk of diabetes in the future. Those randomised to the PAIGE programme group will receive a 1 hour group education session, a pedometer as a motivational tool to increase physical activity and a free 12 week referral to a CWMO. At the end of the study women in the control group will receive a copy of all the programme materials and will be offered a free 12 week referral to a CWMO. The main disadvantage of taking part in the study is having to give up some spare time. While visit 1 coincides with the participants routine postnatal visits, participants will be asked to attend for one additional study visit, 6 months later. Also, if assigned to the PAIGE group, participants will be asked to attend CWMO sessions to aid weight-loss. The only other disadvantages known are mild discomfort associated with taking a blood test, and that some people may feel a little sick when asked to drink the sweet drink for the oral glucose tolerance test.

Where is the study run from?

The study is being run from the Royal Victoria Hospital Belfast (lead centre) and Craigavon Area Hospital in collaboration with Queens University Belfast.

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

The study is starting in June 2013 and will run for 18 months.

Who is funding the study?

The Public Health Agency, Northern Ireland.

Who is the main contact?

Professor David R McCance
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Contact information

Type(s)

Scientific

Contact name

Prof David R McCance

Contact details

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Additional identifiers

Protocol serial number

12120DMcC-SW

Study information

Scientific Title

Postnatal lifestyle Intervention programme for overweight women with previous Gestational diabetes mellitus (PAIGE)

Acronym

PAIGE

Study objectives

A pragmatic, postnatal lifestyle intervention, incorporating referral to a commercial weight management organisation (CWMO), developed in partnership with overweight women with a recent history of gestational diabetes mellitus (GDM) and their healthcare professionals, will lead to a reduction in weight after 6 months.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Office of Research Ethics Committees Northern Ireland (ORECNI), 03/04/2013; ref: 13/NI/0026

Study design

Multi-centre non-blinded randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Postnatal women with a history of gestational diabetes in a recent pregnancy, and who are overweight

Interventions

The experimental arm will be enrolled in a lifestyle intervention comprising a one hour educational programme delivered during the time they attend for the routine postnatal oral glucose tolerance test (6-12 weeks postpartum), offered a free referral to a three month

commercial weight management organisation (Slimming World) scheme, given a pedometer as a motivational tool and will receive intermittent contact via texts and structured phone calls.

The control arm will receive usual care alone and standard post partum lifestyle advice for women with gestational diabetes.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Weight at 6 months (taking into account any difference in weight at baseline between the intervention and control groups)

Key secondary outcome(s)

1. Fasting glucose and 2h OGTT glucose (optional)
2. Waist circumference
3. Pedometer counts, change from baseline at 6 months (intervention group only)
4. Questionnaire data pertaining to physical activity, nutrient intake as estimated by food diary, General Health and Well Being, Motivation to change and Risk Perception Survey for Developing Diabetes (RPS-DD)

Completion date

31/12/2014

Eligibility

Key inclusion criteria

1. Aged 18 years or older
2. History of gestational diabetes mellitus in last pregnancy. The definition of GDM will be according to the new International Association of the Diabetes in Pregnancy Study Groups (IADPSG) consensus criteria (7), following a 75g oral glucose tolerance test (OGTT) (fasting glucose ≥ 5.1 mmol/l or 1h plasma glucose ≥ 10 mmol/l or 2h plasma glucose ≥ 8.5 mmol/l).
3. Body mass index (BMI) ≥ 25 kg/m² at booking (if less than 16 weeks, otherwise based on reported pre pregnancy weight) and BMI ≥ 25 kg/m² at their postnatal OGTT visit. A BMI equivalent to 25 kg/m² will be used for non Caucasian subjects.
4. Normal or impaired glucose tolerance or impaired fasting glucose (IFG/IGT) on postnatal glucose tolerance testing.
5. Mothers will be encouraged to continue to breast feed. The aim will be to recruit mothers who are not planning a further pregnancy in the next 6 months.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Female

Key exclusion criteria

1. Pregnancy outcome resulting in an anomaly or still birth
2. History of diabetes outside pregnancy or diagnosis of diabetes on the postnatal OGTT
3. Heart, liver, or chronic renal disease
4. Medications that adversely affect glucose tolerance (e.g. steroids)
5. Contraindications to participating in moderate physical activity
6. Moderate/severe depressive illness
7. Excess alcohol consumption
8. Planning another pregnancy in the next 6 months
9. Taking part in another research study
10. Inability to adequately understand verbal explanations or written information given in English, or who have special communication needs
11. Already attending a CWMO

NB: Women will not know if they have a diagnosis of diabetes outside pregnancy until several days after the OGTT appointment (visit 1). Women who are diagnosed with persisting diabetes following the postnatal OGTT will be contacted by their diabetes care team for follow up and will be excluded from the study post randomisation.

Date of first enrolment

01/06/2013

Date of final enrolment

31/12/2014

Locations

Countries of recruitment

United Kingdom

Northern Ireland

Study participating centre

Consultant Physician

Belfast

United Kingdom

BT12 6BA

Sponsor information

Organisation

Belfast Health and Social Care Trust (UK)

ROR

<https://ror.org/02tdmfk69>

Funder(s)

Funder type

Government

Funder Name

Public Health Agency, Northern Ireland (UK)

Results and Publications

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	01/07/2018		Yes	No
HRA research summary			28/06/2023	No	No