

Public notice to be displayed on trust website.

Version 1

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Study title: Prediction of Gestational Diabetes by measuring serum pregnancy associated protein-A (PAPP-A) and HbA1c in the first trimester of pregnancy.

Glossary of terms

Gestation - the time between conception and birth.

Glycosuria - glucose (sugar) in urine.

PAPP-A - Pregnancy associated plasma protein-A

HbA1c – glycated haemoglobin, a test used to assess average blood sugar over the last 2-3 months.

Study details

Gestational diabetes – a condition in which women develop diabetes during pregnancy.

This is a retrospective cohort study. First trimester and 24-28-week **data related to pregnant women will be retrieved from the Laboratory Information Management System (LIMS) and Lifecycle database at the Norfolk and Norwich University Hospital (NNUH)**. The data will be used to analyse the association between first trimester PAPP-A and HbA1c and subsequent glucose tolerance test results or Glucose and HbA1c performed between 24-28 weeks' gestation.

Only pregnant women with the following risk factors were offered first trimester HbA1c and follow up oral glucose tolerance test (OGTT) at between 24- and 28-weeks' gestation:

- Susceptible ethnic group
- An episode of glycosuria
- A previous baby weighing over 4.5kg
- A body mass index (BMI) of over 30 (clinically obese)
- A family history of diabetes

Only pregnant women with one or more of the above risk factors, within the 'at risk of GDM' group, will be included in this study. Pregnant women with pre-existing diabetes type 1 or type 2 will be excluded from the data analysed.

The primary objective of the study will be to determine if pregnant women with a low PAPP-A (less than 0.4 MoM) are at increased risk of gestational diabetes.

This will be a final project for an MSc degree being completed by Victoria Cole, a Biomedical Scientist in the Clinical Biochemistry department at the Norfolk and Norwich University Hospital. Data collection and analysis will be performed by Victoria Cole.

For further information on how the Trust uses your information please [click here](#).

For more information or if you wish to opt-out of use of data for this study, please contact victoria.cole@nnuh.nhs.uk or phone 01603646047.