

Title: Can "continuous glucose monitors" improve postpartum screening for diabetes?

Researchers:

Dr. Jennifer Yamamoto, Nominated Principal Investigator: University of Manitoba

Dr. Jamie Benham, Co-Applicant: University of Calgary

Dr. Lois Donovan, Co-Applicant: University of Calgary

Dr. Denice Feig, Co-Applicant: University of Toronto

Dr. Depeng Jiang, Co-Applicant: University of Manitoba

Dr. Patricia Lemieux, Co-Applicant: Laval University

Dr. Kara Nerenberg, Co-Applicant: University of Calgary

Dr. Christy Pylypjuk, Co-Applicant: University of Manitoba

Dr. Garry Shen, Co-Applicant: University of Manitoba

Research area: Gestational diabetes

Award: End Diabetes 100 Award, 2021-2024

Summary:

Gestational diabetes (GDM) is one of the most common medical problems in pregnancy. It occurs when there are high blood sugar levels late in pregnancy. One in two people with GDM will develop type 2 diabetes within 15 years of delivery. For this reason, it is important that these people get a diabetes blood test after pregnancy called an "OGTT". Unfortunately, most individuals do not take this test. A new device called a continuous glucose monitor or "CGM" is a small disc that is placed on the arm. It can be easily placed and removed by the person wearing it. It is worn for 2 weeks and can stay in place for activities such as sleeping and showering. Over 2 weeks, over 1300 sugar measurements are taken without the person wearing the device having to do any testing.

Research objective: We will examine if CGM can be used in people with GDM after delivery to predict their risk of diabetes.

Methods: People with GDM will be invited to participate. A CGM will be put on the arms of participants before they leave hospital after delivery. Participants will be asked to wear the CGM for 2 weeks and mail it back to researchers. 4-6 months after delivery, participants will be asked to do the recommended diabetes blood test.

Impact of research: We must improve diabetes testing after having a baby. This will allow us to target our efforts to improve the early diagnosis and treatment of diabetes following GDM.