AT THE FOREFRONT
UChicago Medicine

Department of Obstetrics & Gynecology
Physician Connect
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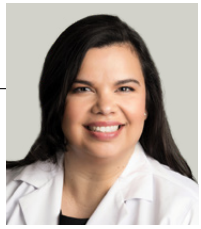
BRIEFINGS FROM
WOMEN'S HEALTH EXPERTS

Diabetes in Pregnancy Program



by Laura Dickens, MD and Maritza G. Gonzalez, MD

What is diabetes in pregnancy and what are the challenges?

Diabetes is one of the most common medical complications of pregnancy. The incidence of pre-existing and gestational diabetes is increasing in the United States, with implications beyond pregnancy and the postpartum period for both mothers and babies. Early blood glucose control is proven to optimize maternal and fetal outcomes in pregnancies affected by diabetes. Prompt diagnosis and treatment of diabetes in pregnancy reduces the risk of pregnancy complications and adverse neonatal outcomes, such as stillbirth, macrosomia, and shoulder dystocia.

Prevalence: In the United States, 1-2% of pregnant women have pre-existing type 1 or type 2 diabetes. An additional 6-9% of pregnant women will be diagnosed with gestational diabetes.

Diagnosis: Gestational diabetes mellitus (GDM) is diabetes diagnosed in the second or third trimester of pregnancy that is not clearly pre-existing type 1 or 2 diabetes. As pregnancy progresses, placental hormones lead to an increase in insulin resistance. GDM develops when the body is unable to increase insulin secretion to compensate.

With dramatic increases in rates of obesity and type 2 diabetes, identification of women with pre-existing type 2 diabetes by first trimester screening is critical. Diabetes diagnosed in the first trimester is classified as pre-existing type 2 or, rarely, type 1 diabetes. Women without risk factors or those with normal early screening testing should be screened for GDM at 24-28 weeks of pregnancy. Second trimester screening is pertinent to reduce the risk of GDM complications and allow for prompt intervention. For identification of pre-existing diabetes in pregnancy, we recommend a one-hour oral glucose tolerance test with a fasting three-hour glucose tolerance diagnostic test if needed, or a two-hour fasting diagnostic oral glucose tolerance test.

Treatment: Lifestyle interventions are the foundation of GDM treatment, including healthy eating, physical activity, and appropriate weight gain. With these measures, up to 80-90% of GDM can be managed without medication. If lifestyle measures are insufficient, medications, primarily insulin, are recommended. The use of insulin pumps and continuous glucose monitors can ease the burden of diabetic care management in pregnancy.

Follow-up: After experiencing a pregnancy with GDM, maternal risk for type 2 diabetes and cardiovascular disease increases. Postpartum glucose tolerance testing can identify women with impaired glucose tolerance who will benefit from interventions to improve their long-term health and reduce their risk of type 2 diabetes. These patients can also benefit from participating in diabetes prevention programs. Children of women with GDM are at increased risk for obesity and type 2 diabetes. Diabetes in pregnancy programs, like ours, decrease diabetes-associated pregnancy complications and can help connect women to long-term or preventative care for diabetes.

The University of Chicago Diabetes in Pregnancy Program's (DIPP) mission is to improve maternal health and prevent diabetes complications in pregnancy with multidisciplinary evidence-based treatment, patient education, physician training, research, and health promotion.

Who is at risk for diabetes in pregnancy?

All patients are at risk for developing diabetes in pregnancy and it is part of routine prenatal care to be screened in pregnancy. At the initial prenatal encounter, patients should be assessed for the risk factors of pre-existing type 2 diabetes. Patients with a history of the risks listed below should be screened in the first trimester of pregnancy:

» Being overweight or obese

» Physical inactivity

» First-degree relative with diabetes

» High-risk race or ethnicity

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- Have previously given birth to an infant weighing 9 lbs. or more
- Previous gestational diabetes
- Hypertension
- Hypercholesterinemia (High-density lipoprotein < 35mg/dL ortriglyceride >250mg/dL)
- Women with polycystic ovarian syndrome
- History of cardiovascular disease

Who should be referred for consultation and management?

Patients who would benefit from a referral:

- Newly pregnant with pre-existing type 1 or type 2 diabetes
- Recently diagnosed gestational diabetes, especially if diagnosed early in pregnancy, and suspected pre-existing type 2 diabetes
- Patients with an abnormal postpartum glucose tolerance test indicating persistent pre-diabetes or type 2 diabetes
- Patients with pre-existing type 1 or type 2 diabetes who need preconception counseling and glycemic control for decreasing risk of pregnancy complications

What services are offered in our Diabetes in Pregnancy Program?

We firmly believe in a multidisciplinary approach to diabetes care in pregnancy, which utilizes evidence-based practices along with expert counseling to empower patients and improve their long-term health.

Our patients benefit from direct access to specialists in Maternal-Fetal Medicine, Endocrinology, Sonography, and Nutrition in a centralized clinic setting. In the same visit, patients will be seen by subspecialists who care for patients with diabetes in pregnancy, perform specialized ultrasounds, and provide the latest diabetic technology for care management, including insulin pumps and continuous glucose monitors in appropriate situations.

If you are a physician seeking treatment for a patient requiring care for diabetes in pregnancy, our Diabetes in Pregnancy Program can arrange for your patient to consult with multiple subspecialists in one location on their first visit. We will help determine your patient's consultative needs prior to their initial visit to help expedite care.

After the patient's initial consult, our team formulates an individualized plan and management recommendations based on each patient's unique risk factors and circumstances. We keep you informed on their progress and help coordinate follow-up diabetic care, so patients can continue to see their obstetrical provider for prenatal care. We will also send a full report after the patient's postpartum follow-up visit. Virtual follow-up visits are available, and we can facilitate ongoing endocrinology care for pre-existing or persistent diabetes after delivery if needed.

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AT THE FOREFRONT
UChicago Medicine

DIABETES IN PREGNANCY PROGRAM

PATIENT CARE LOCATIONS

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Chicago, IL 60637

NEW River East - Chicago
355 E. Grand Ave.
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Orland Park
14290 S. La Grange Road
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Virtual appointments are available upon request.
To schedule a patient, e-mail us at **womenshealth@uchospitals.edu**
Refer patients by calling **773-702-6118**
Visit **UChicagoMedicine.org/womens-health** to learn more.