

Diagnosing and treating an increasing number of women with gestational diabetes mellitus



Gestational diabetes mellitus (GDM) is a form of the disease that develops during pregnancy and is the leading cause of pregnancy complications. The American Diabetes Association estimates that nearly one in five expectant mothers are diagnosed with GDM. Calling diabetes one of America's fastest growing diseases, the UCLA Center for Health Policy Research reported in 2016 that the diabetes incidence in California had increased by 35 percent since 2001.

Although the exact cause of GDM is unknown, it is thought that hormones produced by the placenta lead to insulin resistance, allowing blood sugar levels to become elevated.

Gestational diabetes can affect mother and baby

Most women with gestational diabetes who keep their blood sugar levels under control go on to have a successful pregnancy and a healthy baby, with the condition typically resolving after delivery. But left uncontrolled, diabetes during pregnancy can set the stage for serious health problems for both mother and baby.

GDM increases the chances of delivering an excessively large baby, premature birth and the likelihood of cesarean section. Additionally, for the mother, high blood pressure and an increased risk of heart disease later in life occur more frequently. About half of the women develop type 2 diabetes within 10 years.

Exceptional care structured for patient accessibility and convenience

"The commitment of the gestational diabetes team is simple: to deliver exceptional and accessible health care to each patient in a setting of compassion and respect," says Aisling Murphy, MD, assistant clinical professor of maternal fetal medicine. "Appointments with multiple specialists at our centers and satellite offices are scheduled for the same day whenever possible."

"We make it easy for patients to access our entire diabetes team in a variety of ways that are simple and convenient," says Matthew Freeby, MD, director of UCLA's Gonda Diabetes Centers in Westwood and Santa Monica. "The my.UCLAhealth.org website provides non-emergency, 24/7 access to managing appointments, lab results and more. Our recently introduced telehealth program allows patients to remotely connect with a UCLA physician by smartphone, tablet or computer. During the visit, a doctor can evaluate common symptoms, offer a diagnosis and provide a prescription, if needed.

"We are thrilled to now extend state-of-the-art care to busy patients both in and out of the doctor's office," says Dr. Freeby.

Problems for the baby include a higher risk of diabetes, childhood obesity and heart disease. UCLA researchers recently published findings indicating that elevated glucose levels during pregnancy may keep the baby's cardiac cells from maturing normally.

Effectively managing and treating gestational diabetes can significantly reduce the likelihood of these complications.

Comprehensive support across medical specialties

At UCLA, a team-based approach brings together a dedicated staff of board-certified obstetricians, endocrinologists, nurse educators and registered dietitians. The core group works closely with other UCLA specialists skilled in the diagnosis and treatment of diabetes complications, creating a large and collaborative network of clinical support for expectant mothers.

Research conducted at UCLA has shown patient education to be a key factor in lowering the risk of diabetes complications. The UCLA Diabetes Education Program at both UCLA medical centers and satellite offices throughout the Los Angeles area offer one-on-one counseling sessions and group workshops.

Diagnosis with routine screening

Women with gestational diabetes typically have no symptoms, and expectant mothers often learn of the condition during routine pregnancy screening.

Diagnostic testing generally takes place between the 24th and 28th weeks of pregnancy. Women at high risk, however, are usually screened during their first trimester.

An increase in the number of American women who are obese and over the age of 35 when becoming pregnant—key risk factors for GDM—is thought to be an important component in the disease's growing prevalence. Other risk factors include a family history of diabetes, high blood pressure, having previously given birth to a baby that weighed more than nine pounds, and being African American, Native American, Asian or Latina.

Determination of gestational diabetes is made by fasting blood sugar analysis, one, two and three hours after drinking a glucose solution. The one-hour test — the oral glucose challenge — establishes probability, and the three-hour test — the oral glucose tolerance test — confirms or rules out the condition.

Keeping blood sugar levels under control

The majority of women with gestational diabetes will be able to control their blood sugar with simple diet modification. For up to 30 percent of women, though, diet alone is not enough to bring glucose levels under control. For these women, insulin therapy is usually indicated and expectant mothers are taught how to manage the disease on a daily basis to keep blood sugar levels in the normal range.

UCLA's success rates in treating both common and more complex obstetrical and endocrine disorders are among the best in the nation.

Participating team members

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