

## Gestational Diabetes May be Treated with a Pill Instead of Insulin

Gestational diabetes is a disease in which your blood sugar is too high during pregnancy. Elevated blood sugar during pregnancy is not good for you or your baby. Of every 100 pregnant women in the United States, 3–8 develop gestational diabetes. Gestational diabetes is defined as diabetes that begins while a woman is pregnant, and it typically goes away after the baby's birth. It does, however, increase a woman's risk for having diabetes again later.

Many factors increase the risk of developing gestational diabetes, including release of hormones by the placenta, weight gain, high calorie intake, and lack of exercise. Sometimes, when one or more of these factors affects a pregnant woman, her pancreas is unable to produce enough insulin. Normally, the pancreas produces insulin in response to high blood sugar, and insulin helps move sugar out of the blood and into the cells of your body so it can be used as energy.



If gestational diabetes is not treated, serious complications can occur. You may develop dangerously high blood pressure and deliver an abnormally large baby. Your baby will also have an increased risk of dying during the last 4–8 weeks of pregnancy if your high blood sugar is left untreated. Untreated gestational diabetes can also lead to breathing problems for your baby after delivery, and can increase your baby's chances of becoming obese and developing diabetes later in life.

Until recently, it was thought that diet and insulin were the only treatments for maintaining adequate control of blood sugar in pregnant women. New studies, however, suggest that the oral medication glyburide (Micronase, Diabeta) may be another option. Glyburide is currently used by some individuals who have diabetes but do not require insulin. Glyburide helps the pancreas secrete more insulin, which could low-

### RISK FACTORS FOR GESTATIONAL DIABETES

- A family history of diabetes
- Being overweight at the time of pregnancy
- Being older than 25 years of age
- Previously having a stillborn baby or a baby weighing more than 9 pounds
- History of abnormal glucose tolerance
- Being a member of an ethnic group that has an increased risk of diabetes: Hispanic, African American, Native American, Pacific Islander

Based on "The Safety of Glyburide for Gestational Diabetes: A Meta-Analysis of Pregnancy Outcomes" by Myla Moretti, Massoud Rezvani, and Gideon Koren, *The Annals of Pharmacotherapy*, April 2008, <http://dx.doi.org/10.1345/aph.1K577>. For Our Patients is provided by *The Annals* to help explain the latest research and information relating to your medications. These summaries are for informational purposes only and are not a substitute for professional advice from your personal medical provider. If you have questions about this material, you should discuss it with your physician or pharmacist. This summary may be reproduced without permission for not-for-profit educational purposes only. Any other use must be approved by the publisher. © Copyright 2008, Harvey Whitney Books Company, [www.hwbooks.com](http://www.hwbooks.com). FOPE3 DOI 10.1345/fop.1K577

er blood sugar in women with gestational diabetes.

A recent study reviewed the medical literature to determine whether glyburide was a safe and effective treatment for gestational diabetes. Analysis of 9 studies comparing the safety and efficacy of glyburide (used by 745 pregnant women) with insulin (used by 637 pregnant women) showed that glyburide was not associated with an increased risk of adverse effects. Specifically, glyburide did not increase the likelihood that the baby would be abnormally large, did not cause babies to be delivered prematurely, did not lead to more babies requiring intensive care services, did not increase the likelihood of infant death, and did not increase the risk of low blood sugar in babies. In fact, it appears that very little glyburide crosses the placenta, and this minimizes the baby's exposure to the drug.

While there are limitations to the analysis, current data suggest that glyburide could be an option for appropriately selected pregnant women who need help controlling their blood sugar. This could be especially good news for women who are unlikely to use insulin injection regimens or for women who simply cannot afford the cost of insulin and the necessary injection devices.

#### **FOR MORE INFORMATION**

Centers for Disease Control and Prevention  
[www.cdc.gov/ncbddd/bd/diabetespregnancyfaqs.htm](http://www.cdc.gov/ncbddd/bd/diabetespregnancyfaqs.htm)

National Institute of Child Health and Human Development  
[www.nichd.nih.gov/health/topics/Gestational\\_Diabetes.cfm](http://www.nichd.nih.gov/health/topics/Gestational_Diabetes.cfm)

National Institute of Diabetes and Digestive and Kidney Disorders  
<http://diabetes.niddk.nih.gov/dm/pubs/gestational/>