

Postpartum Screening for Abnormal Glucose Tolerance in Women Who Had Gestational Diabetes Mellitus

Committee on Obstetric Practice

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ABSTRACT: Establishing the diagnosis of gestational diabetes mellitus offers an opportunity not only to improve pregnancy outcome, but also to decrease risk factors associated with the subsequent development of type 2 diabetes. The American College of Obstetricians and Gynecologists' Committee on Obstetric Practice recommends that all women with gestational diabetes mellitus be screened at 6–12 weeks postpartum and managed appropriately.

Gestational diabetes mellitus (GDM), defined as carbohydrate intolerance leading to hyperglycemia with onset or first recognition during pregnancy, affects 2–10% of pregnancies in the United States depending on the characteristics of the population studied (1). Gestational diabetes mellitus is characterized by insulin resistance that is specific to pregnancy. This Committee Opinion augments ACOG Practice Bulletin No. 30: Gestational Diabetes (2) by highlighting recent thinking about the risk for diabetes mellitus among women whose pregnancies were affected by GDM, and presents recommendations for screening and management for these women.

Although the carbohydrate intolerance of GDM frequently resolves after delivery (3, 4), up to one third of affected women will have diabetes or impaired glucose metabolism at postpartum screening, and it has been estimated that 15–50% will develop diabetes in the decades following the affected pregnancy (5–12). The original cutoff points for performing an abnormal glucose tolerance test in pregnancy were chosen for their ability to predict the subsequent onset of type 2 diabetes mellitus (13). Postpartum screening at 6–12 weeks has been recommended for women who had GDM to identify women with diabetes mellitus, or impaired fasting glucose level, or impaired glucose tolerance (14, 19). The latter two may respond to life-

style modification and pharmacologic interventions to decrease incident diabetes. However, there is marked variability in the proportion of women with GDM who are screened postpartum as well as in the type of screening used (6–7, 9, 15–20).

Either a fasting plasma glucose test or the 75-g, 2-hour oral glucose tolerance test are appropriate for diagnosing diabetes. Although the fasting plasma glucose test is easier to perform, it lacks sensitivity for detecting other forms of abnormal glucose metabolism; results of the oral glucose tolerance test can confirm an impaired fasting glucose level and impaired glucose tolerance (see Table 1). In light of this, the Fifth International Workshop on GDM recommended that women with GDM undergo a 75-g oral glucose tolerance test 6–12 weeks postpartum (21).

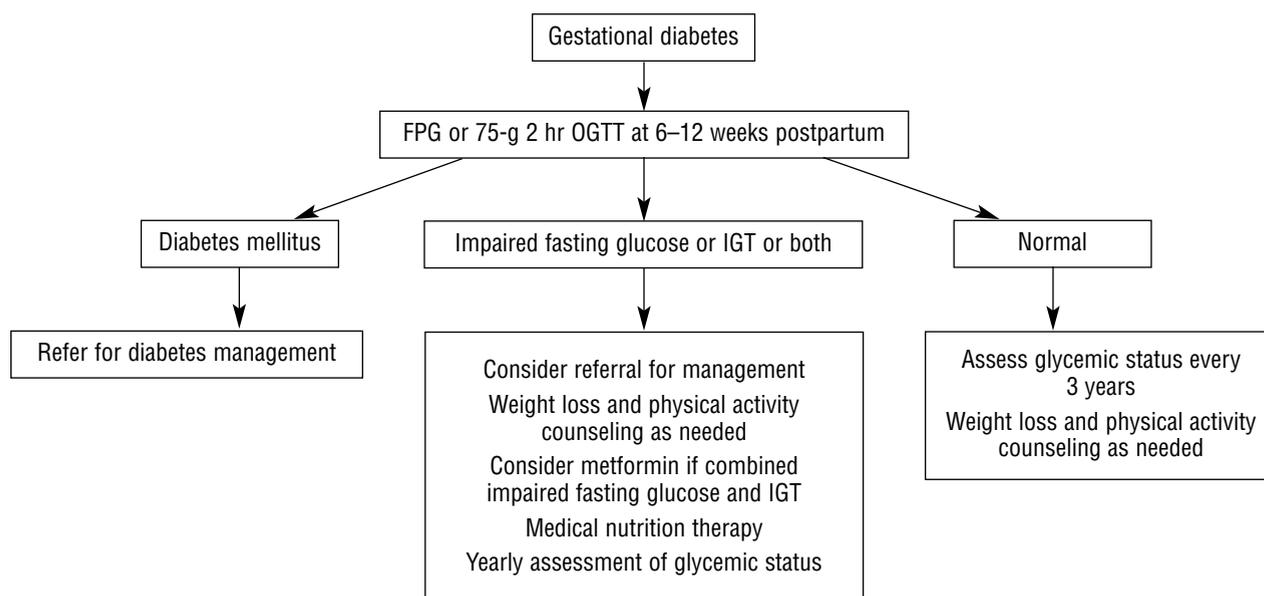
Establishing the diagnosis of GDM offers an opportunity not only to improve pregnancy outcome, but also to affect risk factors associated with the subsequent development of type 2 diabetes. The American College of Obstetricians and Gynecologists' Committee on Obstetric Practice recommends that all women with GDM be screened at 6–12 weeks postpartum and managed appropriately (see Fig. 1). The American Diabetes Association recommends repeat testing at least every 3 years for women who had a pregnancy affected by GDM and normal results of postpartum screening (14). For women who may



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Table 1. Diagnostic criteria for diabetes mellitus, impaired fasting glucose, and impaired glucose tolerance.

Test	Diabetes	Impaired Fasting Glucose	Impaired Glucose Tolerance
Fasting plasma glucose	Fasting plasma glucose is greater than or equal to 126	Fasting plasma glucose is 100–125	NA
75-g 2 hr oral glucose tolerance test	Fasting plasma glucose is greater than or equal to 126 or 2-hr plasma glucose is greater than or equal to 200	Fasting plasma glucose is 100–125	2-hr plasma glucose is 140–199

**Fig. 1.** Management of postpartum screening results. Abbreviations: FPG, fasting plasma glucose; OGTT, oral glucose tolerance test; IGT, impaired glucose tolerance.

have subsequent pregnancies, screening more frequently has the advantage of detecting abnormal glucose metabolism before pregnancy and provides an opportunity to ensure preconception glucose control (21). Women should be encouraged to discuss their GDM history and need for screening with all of their health care providers.

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