

Insulin resistance is related to the metabolic changes of pregnancy, during which the increased insulin demands may lead to IGT or diabetes. The American Diabetes Association (ADA) recommends that diabetes diagnosed within the first trimester be classified as preexisting pregestational diabetes rather than GDM. In 2019, the International Diabetes Federation (IDF) estimated that 16% of pregnancies worldwide were affected by either GDM or preexisting DM. Most women with GDM revert to normal glucose tolerance postpartum but have a substantial risk (35–60%) of developing DM in the next 10–20 years. In addition, children born to a mother with GDM also have an increased risk of developing metabolic syndrome and type 2 DM later in life. Currently, the ADA recommends that women with a history of GDM undergo lifelong screening for the development of diabetes or prediabetes at least every 3 years.

■ ATYPICAL DIABETES

It is increasingly recognized that some forms of diabetes have features of both type 1 and type 2 diabetes. These are distinct from monogenic forms (MODY) as they have not been linked to single gene defects. The development of a type 2 diabetes phenotype before puberty and a type 2 diabetes phenotype in very lean individuals are examples of atypical diabetes. An additional example is ketosis-prone diabetes, where individuals present with ketoacidosis, but do not require long-term exogenous insulin therapy. Many of these individuals are African American or Asian in heritage. Mechanisms underlying atypical forms of diabetes are being actively studied.

EPIDEMIOLOGY AND GLOBAL CONSIDERATIONS

The worldwide prevalence of DM has risen dramatically over the past two decades, from an estimated 30 million cases in 1985 to 463 million in 2019 (**Fig. 403-2**). Based on current trends, the IDF projects that 642 million individuals will have diabetes by the year 2040 (see <http://www.idf.org/>). Although the prevalence of both type