COMMENTS AND RESPONSES

Comment on: American Diabetes Association. Standards of Medical Care in Diabetes—2011. Diabetes Care 2011;34(Suppl. 1): S11–S61

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How to screen and treat gestational diabetes mellitus (GDM) has always been controversial for clinicians and decision makers. The problem is complex, and the evidence is limited. The new standards set by the American Diabetes Association (ADA) in 2011 (1) recommend *1*) universal screening at 24–28 weeks of gestation (2010 ADA standards recommended selective screening based on risk factors) and 2) an oral glucose tolerance test with a diagnostic fasting plasma glucose of ≥92 mg/dL (4.5 mmol/L) (much lower than the World Health Organization [WHO] criteria of ≥126 mg/dL [7.0 mmol/L] commonly used in clinical practice in Europe). Furthermore, diabetes is diagnosed when only one abnormal value is detected (whereas in the 2010 standards two abnormal values were needed).

The recommendation is graded as C ("evidence from poorly controlled or uncontrolled studies") (1) and is based on the results of the Hyperglycemia and Adverse Pregnancy Outcome (HAPO) study (2), a multicentric observational study that suggests a linear relationship between GDM risk and glucose level. It is not clear what led the ADA panel to change its 2010 recommendations because the HAPO study fails to identify a cut off level for plasma glucose predictive of an increased risk for the mother and the baby, whereas, as recommended by the UK National Screening Committee (3), defining a clear threshold should be a prerequisite for a screening test. Moreover, the increasing risk identified by the study relates mostly to outcomes that are not clinically relevant, whereas evidence on clinically important outcomes is lacking. Despite this limited evidence, the ADA issued a recommendation that will certainly increase the number of women labeled as having GDM (17.8% of pregnant women based on HAPO data).

We believe that the implementation of the ADA recommendation may give rise to a number of problems. Firstly, the clinical benefits for women and babies are unclear. A recent systematic review (4) suggests that the clinical benefits of treating GDM, diagnosed according to the WHO criteria, are modest and limited only to not primary outcomes (shoulder dystocia) even when intensive treatment is provided. By adopting a lower diagnostic threshold it is likely that the benefits will be even smaller. Secondly, pregnant women diagnosed as having GDM that will not reach normal glycemic values after lifestyle modifications might be treated with insulin. How many hypoglycemic episodes are acceptable to be confident that we are doing more good than harm by adopting the new screening strategy? Finally, the universal screening might represent a significant burden for health systems, considering that the current practice does not imply an oral glucose tolerance test in every pregnant women. On the basis of the above considerations, the newly published Italian guidelines on antenatal care for healthy pregnant women (5), developed by means of the GRADE methodology for evidence assessment (www.gradeworkinggroup.org), recommend screening for GDM only in women at increased risk by means of the WHO diagnostic criteria. GDM surely requires a prompt diagnosis. Nevertheless, an evidence-based appraisal of the available evidence—balancing benefits and harms, feasibility, resource use, and burden of a universal screening—seems not to support the 2011 ADA recommendations.

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The authors have been involved, at different stages, in the production of the Italian guidelines on antenatal care for healthy pregnant women.

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