

## COMMENTS AND RESPONSES

### International Association of Diabetes and Pregnancy Study Groups Recommendations on the Diagnosis and Classification of Hyperglycemia in Pregnancy

Response to Weinert

In the accompanying comment letter (1), Weinert summarizes published data from the Brazilian Gestational Diabetes Study (2) and comments on applying International Association of Diabetes and Pregnancy Study Groups (IADPSG) Consensus Panel recommendations (3) for the diagnosis of gestational diabetes mellitus (GDM) to that cohort.

The Brazilian study provided evidence that adverse perinatal outcomes are associated with levels of maternal glycemia below those diagnostic of GDM by American Diabetes Association or World Health Organization criteria. However, the results were potentially confounded by the treatment of GDM. It did find that women with GDM were at increased risk for some outcomes, but did not define diagnostic thresholds as suggested by Weinert. Due to space limitations, this study was not cited in the IADPSG report (3). However, at the June 2008 IADPSG International Workshop Conference on Gestational Diabetes Diagnosis and Classification in Pasadena, California, Dr. Maria Ines-Schmidt, principal investigator of the Brazilian study, presented an unpublished analysis of associations of maternal fasting plasma glucose and 75-g 1-h and 2-h postload glucose with perinatal outcomes. Although the study sam-

ple size was not nearly as large as that of the Hyperglycemia and Adverse Pregnancy Outcome (HAPO) study, associations tended to be similar (4).

Weinert also focuses on the fact that the IADPSG recommended criteria diagnose a greater proportion as GDM than other criteria. The major reason for this is that the IADPSG diagnosis of GDM only requires that one or more values meets or exceeds a threshold; most other strategies require at least two abnormal values for the diagnosis. In addition, as noted in the IADPSG report (3), relatively small changes in glucose thresholds, especially for fasting plasma glucose, result in large differences in proportions diagnosed as GDM.

Weinert states that in the analysis of Brazilian results, 1-h and 2-h 75-g oral glucose tolerance test values “virtually overlapped for predicting fetal macrosomia and composite outcome.” This is offered in support of a shorter 1-h test. As Weinert indicated, FPG and 1-h thresholds identified a large majority of GDM women in the HAPO study cohort. However, as indicated in the IADPSG report (3), the 2-h threshold identified a small proportion of women not detected by fasting and 1-h thresholds who were at increased risk of adverse outcomes.

The primary focus of the IADPSG Consensus Panel was to recommend diagnostic threshold values that identified clinically significant risk for adverse pregnancy outcome. We feel that goal was achieved with the strategy for detection and diagnosis of GDM that was recommended.

BOYD E. METZGER, MD<sup>1</sup>  
STEVEN G. GABBE, MD<sup>2</sup>  
BENGT PERSSON, MD, PHD<sup>3</sup>  
LYNN P. LOWE, PHD<sup>4</sup>  
ALAN R. DYER, PHD<sup>4</sup>  
JEREMY J.N. OATS, MD<sup>5</sup>  
THOMAS A. BUCHANAN, MD<sup>6</sup>

From the <sup>1</sup>Division of Endocrinology, Northwestern University Feinberg School of Medicine, Chicago, Illinois; <sup>2</sup>Department of Obstetrics and Gynecology, The Ohio State University, Columbus, Ohio; the <sup>3</sup>Department of Pediatrics, Karolinska Institute, Stockholm, Sweden; the <sup>4</sup>Department of Preventive Medicine, Northwestern University Feinberg School of Medicine, Chicago, Illinois;

the <sup>5</sup>Department of Obstetrics and Gynaecology, University of Melbourne, Burnley, Victoria, Australia; and the <sup>6</sup>Division of Endocrinology and Diabetes, University of Southern California Keck School of Medicine, Los Angeles, California.

Corresponding author: Boyd E. Metzger, bem@northwestern.edu.

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