



RESPONSE TO COMMENT ON DURAN ET AL.

Introduction of IADPSG Criteria for the Screening and Diagnosis of Gestational Diabetes Mellitus Results in Improved Pregnancy Outcomes at a Lower Cost in a Large Cohort of Pregnant Women: The St. Carlos Gestational Diabetes Study. *Diabetes Care* 2014;37:2442–2450

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Alejandra Duran,^{1,2}
María J. Torrejón,^{2,3} Isabelle Runkle,^{1,2}
and Alfonso L. Calle-Pascual^{1,2}

We thank Rodríguez-Gutiérrez and González-González (1) for their interest in our article (2). We agree that the original O'Sullivan test must be performed under a nonfasting state and irrespective of the time of the day with no dietary restriction. However, we disagree with the second comment that when performing the O'Sullivan test after 12-h fasting (as in our work) the number of women who are going to be positive with the O'Sullivan test, and consequently be tested with 100 g of glucose loading, is fewer than when compared with the original performance in a nonfasting situation and therefore may underestimate the diagnosis of gestational diabetes mellitus (GDM) according to Carpenter-Coustan criteria.

Since the late 1980s, it is well known that in normal subjects the postprandial state results in an elevation of plasma insulin levels and enhanced insulin sensitivity at lunch, thereby improving carbohydrate tolerance for lunch, thus resulting in a lower elevation of postprandial glucose (3). The effect of a prior meal in decreasing the rise in blood glucose after a subsequent meal (such as 50-g glucose loading)—the so-called second-meal phenomenon—was first

recognized almost a century ago and it has repeatedly been confirmed in healthy subjects and confirmed in type 2 diabetes (4). Although there is variability among individuals in the postprandial glycemic response, this is usually reduced when the same food is eaten in the interprandial compared with the fasting state (5). Therefore, the 50-g test should elicit a higher glucose increase in the fasting than in the nonfasting state. Our group demonstrated that the postprandial glycemic response is clearly reduced when performed during a nonfasting compared with a fasting state (6).

Since 2003, universal and centralized screening for GDM was adopted in our area for practical reasons, and the O'Sullivan test was performed between 8:00 and 9:00 A.M. and after 12 h of fasting together with the second-term blood sample analysis. In 2002, we assessed the rate of positive O'Sullivan tests (>140 mg/dL) conducted in uncontrolled situations for 4 months. A total of 154 out of 573 (26.87%) screened women were positive with the O'Sullivan test. During the 7 months after the implementation of the centralized and universal screening, as described in our article (2), O'Sullivan tests were performed

with 1,063 pregnant women, resulting in 385 positive women (36.21%). This figure, as expected, was greater in the fasting situation as compared with previously uncontrolled studies. During our study between April 2011 and March 2012, 1,750 pregnant women were assessed by means of the O'Sullivan test and 582 (33.25%) were positive. The rate of O'Sullivan test >140 mg/dL remained stable from 2003 to 2012 (between 32–37%) but always higher than previously found in nonfasting situations.

Therefore we cannot consider, as suggested by Rodríguez-Gutiérrez and González-González (1), that performing the O'Sullivan test in the fasting state underestimates the number of patients with positive tests and that GDM according to Carpenter-Coustan criteria was underdiagnosed in our study.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

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¹Endocrinology and Nutrition Department, Hospital Clínico San Carlos, Universidad Complutense de Madrid, Madrid, Spain

²Instituto de Investigación Sanitaria San Carlos, Hospital Clínico San Carlos, Madrid, Spain

³Clinical Laboratory Department, Hospital Clínico San Carlos, Madrid, Spain

Corresponding author: Alfonso L. Calle-Pascual, acallepascual@hotmail.com.

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