COMMENTS AND RESPONSES

Response to Comment on: Chakkera et al. Pretransplant Risk Score for New-Onset Diabetes After Kidney Transplantation. Diabetes Care 2011;34:2141–2145

Responding to our recent article in *Diabetes Care* (1), Valderhaug et al. (2) wrote that we underestimated the prevalence of pretransplant diabetes and the incidence of new-onset diabetes after kidney transplantation (NODAT) because of our diagnostic methods. We diagnosed diabetes pre- and posttransplant using the data available in our practice —prescribed therapy, fasting plasma glucose (FPG), and HbA_{1c}—rather than the 2003 consensus criteria that include an oral glucose tolerance test (OGTT) but not HbA_{1c} (3).

This criticism reflects a controversy about diagnostic criteria that exists even in the absence of kidney disease. Although current criteria are based on HbA_{1c} and fasting and postload glucose, recommendations are vague and inconsistent as to how many of these tests should be performed in specific situations (4,5). It is widely recognized that these three tests with current criteria identify different but overlapping sets of individuals with diabetes (4,5). The relevance of these differences, however, is uncertain. We are unaware of evidence, either in people with or without end-stage renal disease (ESRD), that added benefit is derived from test procedures that diagnose more people (e.g., by adding an OGTT or lowering the cut point for HbA_{1c}, as suggested by Valderhaug et al.). The applicability of diabetes diagnostic criteria developed in otherwise healthy individuals to ESRD (either pre- or posttransplant) is not well understood, especially for HbA_{1c}, because it is influenced in many ways by ESRD and its treatment (6).

Had we routinely used OGTTs pre- and posttransplant, more patients would have been diagnosed with diabetes pretransplant and thus removed from the risk pool for NODAT, as we discussed (1). The incidence posttransplant could have been either lower or higher than what we observed. OGTT, however, is not routinely used clinically in the U.S., either in people with ESRD or in the general population, so we diagnosed diabetes pre- and posttransplant using FPG and HbA_{1c}—data available in our practice. Accordingly, our study is relevant to usual U.S. practice. We agree, however, that further studies using additional tests for diabetes would be informative.

That we and others (6) identified similar risk factors for NODAT, as have been established for type 2 diabetes in general, suggests that these risk factors would be important even if different diagnostic criteria had been used. We believe, therefore, that our findings can help clinicians identify those transplant patients at greatest risk of NODAT.

HARINI A. CHAKKERA, MD, MPH[1]
WILLIAM C. KNOWLER, MD, DRPH[2]

From the [1]Divisions of Nephrology and Transplantation, Mayo Clinic Hospital, Phoenix, Arizona; and the [2]National Institute of Diabetes and Digestive and Kidney Diseases, Phoenix, Arizona.

Corresponding author: Harini A. Chakkera, chakkera.harini@mayo.edu.

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