

Re: Posttransplant Diabetes Mellitus in Kidney Allograft Recipients at Shaheed Hasheminejad Hospital

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Sir,

I read the original paper published in the previous issue of the *Iranian Journal of Kidney Diseases* with great interest.¹ The authors concluded that posttransplant diabetes mellitus (PTDM) was common in a group of kidney transplant patients. This result has been publicized by many articles in the literature²; its incidence after kidney transplantation ranged between 7.9% and 50%.^{3,4}

It is widely believed that diabetes mellitus is a frequent complication and is associated with impaired long-term kidney allograft function and survival.⁵⁻⁷ It is of interest to know how the authors excluded diabetes mellitus before kidney transplantation. Was fasting blood glucose alone or plus glucose tolerance test for exclusion of diabetes mellitus used? Without doing glucose tolerance test, it is predicted to miss some patients with diabetes mellitus and normal fasting blood glucose. Furthermore, family history of diabetes mellitus, acute rejection, and a high corticosteroid dose are known risk factors for new-onset PTDM.⁵ Unfortunately, these data were missing. On the other hand, there was no case with a second transplant among the diabetic patients. Does the center have a policy not to transplant for second time in diabetic cases? If this is the case, it could be a bias.

The prevalence of PTDM in patients at the 24 posttransplant months was less than 12 posttransplant months. Kasiske and colleagues had shown the opposite results.⁸ It may be related to

more infection, sepsis, and cardiovascular events in patients with PTDM and adverse effects on the patient and graft survivals.^{9,10} And finally, as the population of study had not covered hepatitis C virus (HCV) positive recipients, a brief explanation seemed necessary to us. The findings of several studies suggest a possible relationship between HCV infection and diabetes mellitus, both in the general population and in liver or kidney transplant patients. The summary estimate for adjusted odds ratio of a positive HCV was 3.97 with a 95% confidence interval of 1.83 to 8.61 (*P* value for homogeneity < .047) in the systematic review of the published medical literature by Fabrizi and coworkers.¹¹ Thus, pooling of study results demonstrated the presence of a significant link between anti-HCV seropositive status and diabetes mellitus after kidney transplantation. This relationship may provide one potential explanation for the adverse effects of HCV on patient and graft survivals after kidney transplantation.¹²⁻¹⁴ As transplantation for suitable HCV-positive patients is advocated by many experts, additional care is required regarding the immunosuppressive regimen among patients with chronic HCV infection.

Seyed-Moayed Alavian

Baqiyatallah Research Center for Gastroenterology and Liver Disease, Baqiyatallah University of Medical Sciences, Tehran, Iran

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