

To The World Journal of Transplantation Editorial Board

Thank you for considering our manuscript for publication in the renowned World Journal of Transplantation. We also thank the reviewers for their time and comments. We have revised our manuscript with the guidance of their recommendations. As a result, we believe that our manuscript is much stronger now. Please see our explanations regarding this revised version below:

Reviewer 1:

In this single center retrospective study (n=52), the authors evaluated the association between vitamin D deficiency and risk for kidney transplant rejection. In multivariable analysis, vitamin D deficiency was not found to be an independent predictor of kidney transplant rejection. Overall, the manuscript is written well. I have the following comments/critiques:

1. There have been previous studies that tried to answer the same question. So the concept is not novel. Main limitation of the current study is the retrospective design and small sample size.

We agree with the reviewer that our sample size is relatively small. Since routine planned allograft biopsies (i.e., protocol biopsies) are not performed in our center, we did not have the chance to include all patients followed at our transplant clinic. Our analysis includes the results of the on-demand biopsies, which were taken if the transplant physician was concerned about graft dysfunction due to increasing blood urea/creatinine levels, decreasing estimated glomerular filtration rate (eGFR), detection of proteinuria, or donor-specific antibodies. Although our relatively small sample size can be considered a weakness of our study, we believe it is more relevant to the clinical practice as many high-volume transplant centers have left routine allograft biopsy practices.

2. Why were patients in the first year of transplant excluded? Most of the acute rejections usually happen during the first year after transplant.

Infections are highly prevalent in the first year following transplantation. In addition to this, complications related to the surgery are more commonly encountered during the first year post-transplant. With regards to all these, and to obtain a homogenous

group of transplant recipients we have decided to exclude the patients with a follow-up less than a year.

3.What time point was vitamin D level measured? How many patients were on vitamin D replacement?

The serum vitamin D levels of all patients were measured at the time of graft biopsy. This has been emphasized again at the materials and methods section of the manuscript. We thank the reviewer for pointing out the missing number of patients on Vitamin D replacement within the study cohort. Within the study cohort 20 patients were receiving vitamin D treatments according to the KDIGO guidelines. This information was added to the results section.

4.It was not surprising to see that serum phosphorus and PTH levels were higher in rejection group since those patients had lower GFR which can stimulate PTH release and reduce renal phosphorus clearance.

Our study confirms that elevated PTH levels are common among patients with rejection and moderate CKD.

Reviewer 2

Authors investigated the association between the serum 25(OH) vitamin D, as and immunomodulatory factor can predispose transplant recipients to rejection and chronic allograft nephropathy rates. The current manuscript is interesting and well-structured. However, there are numerous comments and questions the authors should address, all were detailed below:

Major concerns;

1.Authors didn't specify the inclusion criteria for selecting patients included in this study.

We would like to thank the reviewer about this comment. Accordingly, we added the phrase below to the materials and methods section to clarify the criteria.

"All adult renal transplant recipients followed at the transplant clinic between January 2013, and July 2018 were reviewed. Among these patients, recipients requiring

allograft biopsy due to progressive graft function decline, new-onset hematuria, and proteinuria were included in the study.”

2. In page 6: authors mentioned “Biopsy specimens were considered adequate if they had ≥ 10 glomeruli and two arteries; patients with inadequate biopsy specimens were excluded from the study”. What was the number of patients that were excluded due to defective specimens?

There were 2 patients excluded from the study due to inadequate biopsy specimens.

3. Did their data were removed from all results?

As mentioned in the exclusion criteria, their results were removed from the study.

4. Did their number were considered from the totally excluded patients that they didn’t meet the inclusion criteria?

They were not considered.

5. Section of materials and methods: showed no details about the detection kits used for estimation of all biochemical parameters?

The details about the kit numbers and producing company were added to the materials and methods section.

6. What were the criteria for selecting donors for kidney transplantation?

The majority (65.4%) of the study population received live donor kidney transplants, of which 3 (5.8%) were transplanted pre-emptively. Of the 34 live donors, 20 were spousal donations, 10 were first-degree relatives, and 4 were second-degree relatives. For the live donors the selection criteria were age greater than or equal to 18 years and mentally capable of making an informed decision, measured GFR using a 24-hour collection or inulin clearance of more than 80-85 ml/min-adjusted for age and gender and no presence of evidence of coercion or financial compensation for donation.

7. No key words

“Keywords: Kidney transplantation; rejection; 25(OH) vitamin D; Vitamin D; chronic allograft nephropathy”