LETTER TO THE EDITOR

Chelation Therapy for Kidney Transplant Recipients With Lead Exposure

To the Editor:

We read with interest the article of Sotomayor et al.[1] According to the researchers, pretransplant plasma lead concentrations, which decrease after kidney transplantation, are associated with increased risk of late kidney allograft failure. The finding is useful and stimulating, as it carries the implication of potential chelation therapy for kidney transplant recipients with lead exposure. Nevertheless, there are several untapped issues associated with this observational study.

First, plasma specimens were used in the study for evaluation of body exposure to lead, cadmium, and arsenic. Plasma samples are suboptimal, and instead whole blood samples should be collected for analysis. A previous study[2] confirmed that lead level in whole blood is the ideal marker to distinguish between patients with different mean levels. Sommar et al[2] found that plasma lead performed well in those with high exposure, such as lead workers, but at low exposures plasma lead was inaccurate. Second, apart from lead, cadmium, and arsenic, the body burden of mercury should also be examined, as excess of mercury is also correlated with poorer kidney outcomes.[3] Third, it is suggested newer hydrophilic dithiol chelators—for example, meso-2,3-dimercaptosuccinic acid (DMSA) or 2,3-dimercapto-propanesulphonate (DMPS)—be considered for kidney transplant recipients with confirmed lead exposure.[4] In this regard, although a blood lead reference value of 10 μg/dL is commonly used in adults, no safe blood lead level has been recognized.[5] Therefore, the harmful effects of lead at any detectible level should not be ignored.

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Article Information

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