Author's reply

Sir,

I thank Dr. Shah for the interest in my article.[1] Indeed, prevention is key to reducing the infection-associated morbidity and mortality and improving outcomes in organ transplant recipients. The role of clinically inapparent infections is being increasingly recognized in several post-transplant complications, new onset diabetes after transplant (NODAT) being one.[2] Hepatitis C and cytomegalovirus infections have been implicated. The prevalence of hepatitis C is high in several dialysis units in India. Most units are content using serological methods for testing. It is not infrequent that patients acquire the infection while on hemodialysis and get transplanted during the window period of infection. This is borne out by the fact that cases are discovered to have evidence of infection for the first time in post-transplant period, whereas sensitive methods show that they were present before transplant. We have shown this for hepatitis B,[3] and the same is likely to be true also for hepatitis C. According to the KDIGO Guidelines for Management of Kidney Transplant Recipients, nucleic acid testing (NAT) should be used for screening in high – prevalence areas.[4] It is therefore essential to do this before transplant in all cases so that those who have not yet had time to mount the antibody response. It would be a good practice to look for hepatitis C at the time of detection of NODAT, especially if NAT was not done before transplant, if the patient is on a low-risk immunosuppressive regime or if the incidence is unusually high.

For CMV, the KDIGO guidelines recommend routine prophylaxis except in D-/R- transplants, especially when T-cell depleting therapies are used.[4] In high-risk populations, chemoprophylaxis reduces the incidence of CMV disease by 60%.[5] However, this recommendation is not followed in most Indian centers. This imposes a burden on the transplant professionals to follow a regime of periodic screening using sensitive techniques (NAT). This is even more important when "desensitization protocols" are used as Dr. Shah notes. If this is done, special screening at the time of NODAT diagnosis is unlikely to be required. Furthermore, the linkage between CMV and NODAT is less strong compared to HCV.

A pre-emptive treatment approach for CMV is followed by several centers the world over. As noted above, this requires screening protocols using sensitive techniques.[6] Some centers screen as frequently as every week early after transplantation. The cost of NAT is constantly coming down, which brings into question the rationale of using antigenemia assays. It should be noted that some trials have shown routing oral ganciclovir prophylaxis to be superior to CMV surveillance monitoring and preemptive ganciclovir therapy.[7]

As has been shown by experience with diagnosis and management of tuberculosis in transplant recipients, approach to infections would vary depending upon the local prevalence, pathogen behavior (for example resistance patterns) and treatment practice. It is therefore important for Indian centers using different protocols to collect data in a rigorous fashion and publish their findings in peer-reviewed journals like the *Indian Journal of Nephrology*.

V. Jha

Department of Nephrology, Postgraduate Institute of Medical Education and Research, Chandigarh, India

Address for correspondence:
Dr. Vivekanand Jha,
Department of Nephrology, Postgraduate Institute of Medical Education and Research, Chandigarh - 160 012, India.
E-mail: vjha@pginephro.org

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