

BK virus screening and management following kidney transplantation: An update

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BK virus is a ubiquitous human virus with a peak incidence of primary infection in children 2-5 years of age and a seroprevalence rate of greater than 60-90% among the adult population worldwide. Following primary infection, BK virus preferentially establishes latency within the genitourinary tract and frequently reactivates in the setting of immunosuppression. In kidney transplant recipients, BK virus is associated with a range of clinical syndromes including asymptomatic viruria with or without viremia, ureteral stenosis and obstruction, interstitial nephritis, and BK allograft nephropathy (BKN). BKN most commonly presents with an asymptomatic rise in serum creatinine between 2 to 60 months after engraftment (median 9 months). A definitive diagnosis requires an allograft biopsy. Over the last two decades, BKN has been recognized as an important cause of allograft dysfunction and graft loss in kidney transplant recipients. Nonetheless, there is currently no standardized protocol for the management of BK viremia or established BKN. An overview of the literature on the various treatment strategies for BK-associated clinical spectrum is presented followed by the authors' suggested approach for post-transplant screening and monitoring for BK virus replication. Suggested treatment strategies are also discussed.

Biography

Phuong-Thu Pham is Associate Clinical Professor of Medicine, Nephrology Division, David Geffen School of Medicine at UCLA and Director of Outpatient Services, Kidney Transplant Program. Her special areas of interest include new onset diabetes mellitus after transplantation, pre-transplant cardiovascular screening, post-transplant cardiovascular disease, glomerular disease recurrence following transplantation, BK virus screening and management following kidney transplantation, and acute and chronic kidney injury following liver transplantation. Her interests in these topics have resulted in publications in well-known Nephrology textbooks and journals as well as invitations to speak at both national and international meetings. She has also served as a reviewer for over twenty major journals and an editorial board member for the Case Reports in Nephrology and Transplantation Technologies and Research journals.

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