Progress of non invasive biomarkers of chronic renal allograft rejection - Meta analysis

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Kidney transplantation is the best therapy option for patients with end-stage renal disease, but immune injury from acute or chronic allograft rejection and non-immune causes, such as nephrotoxicity from calcineurin inhibitors, ischaemia-reperfusion injury, recurrent glomerular disease, allograft BK viral infection, systemic infection, cardiac failure, and malignancy are potential threats. Though significant progress has been made in preventing acute allograft rejection resulting in improved allograft survival the long term function still remains disappointing. Chronic allograft rejection is the leading cause of long-term kidney transplant failure and is manifested by interstitial fibrosis, tubular atrophy, vascular occlusive changes, glomerulosclerosis and progressive renal dysfunction, for the time being renal graft rejection is suspected by graft function deterioration that should be confirmed by graft biopsy which show established damage. At that point rejection criteria could be irreversible. So; early diagnosis and management of allograft rejection is mandatory and it is ideal to have noninvasive monitoring of graft-specific immune activation. Studies to discover sensitive and specific biomarkers in renal transplantation were clinically applicable for predicting rejection but some limitations observed as small sample size. Larger and more comprehensive multicenter studies would be more helpful. Selected patient population had significant heterogeneity and most studies describe patients with defined conditions, because many parameters of immune activation will not be specific to alloimmunity also it was noticed the subjectivity in the clinical diagnoses Moreover, it is difficult to have a uniform state for patients.

Biography

Hesham M. H. Abdelkawy studied medicine in Egypt at the University of Cairo (M.D., 1994). He also received a diploma degree in hospital management from Helwan University Cairo, Egypt and an additional training of health policy and management and epidemiology for 2 years in Emory School of Public Health, USA. He received his Master and Ph.D from Pisa University and School of Medicine, Pisa, Italy. He has published his papers in reputed journals He is working as a transplant nephrologist at the Ministry of Health Kuwait- Ibn Sina Hospital-Organ transplant Center (Hamed al essa).

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