

## **TID-CAST Symposium**

### **Tuberculosis in Transplantation**

Neha Rastogi PANDA

Tuberculosis (TB) - both latent and active is one of the most significant infections in immunosuppressed patients especially solid organ and hematopoietic transplants due to its high frequency and high morbidity and mortality. One of the systematic review revealed overall incidence of TB- 12-18% in transplant patients especially in endemic settings like ours. We have observed 17.6% (22/125) among renal and 10.6% (52/490) hematopoietic transplants over last 5 years with 14.8% mortality (11/74). TB among transplant recipients attributed by reactivation of quiescent *M.tuberculosis* foci, transmission by the graft or contamination by actively infected individuals. Subtle and myriad of atypical clinical presentations often posing diagnostic and hence therapeutic delay and dilemma. Amongst site specificity, Extrapulmonary TB is emerging in these settings (41.8%; 31/74) with lymph node being most common site. This further causing difficulties in terms of diagnostic access, confirmation and duration of therapy. TB has been generally reported as one of delayed infectious complication both after SOT and HSCT with median time of occurrence 105±5 days in our settings. Ongoing immunosuppression –calcineurin inhibitors, steroid therapy, history of previous TB infection and among SCT- total body irradiation and graft versus host disease all are significant risk factors for Tb as observed in our settings. Concurrent drug- drug interactions and elaborate adverse effect profile further have therapeutic limitations and implications in terms of compliance, adherence and duration. With complexities in diagnosis and management mandates the need of careful risk-adapted screening and constant vigilance for symptoms, prompt tissue diagnosis and judicious treatment, are currently the most effective modalities for prevention and management of TB in transplant settings for successful clinical outcome.