

Neglected Tropical Diseases Among Renal Transplant Recipients

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Introduction and Aims

The good outcomes of organ transplantation (Tx) and the advent of new immunosuppressive drugs (ID) make transplantation the first therapeutic option for many diseases. The new ID decreased rejections, but increased the incidence of infections. The aim of this study was assess the impact of neglected tropical diseases (NTDs) and acute kidney injury (AKI) in patients undergoing renal transplantation.

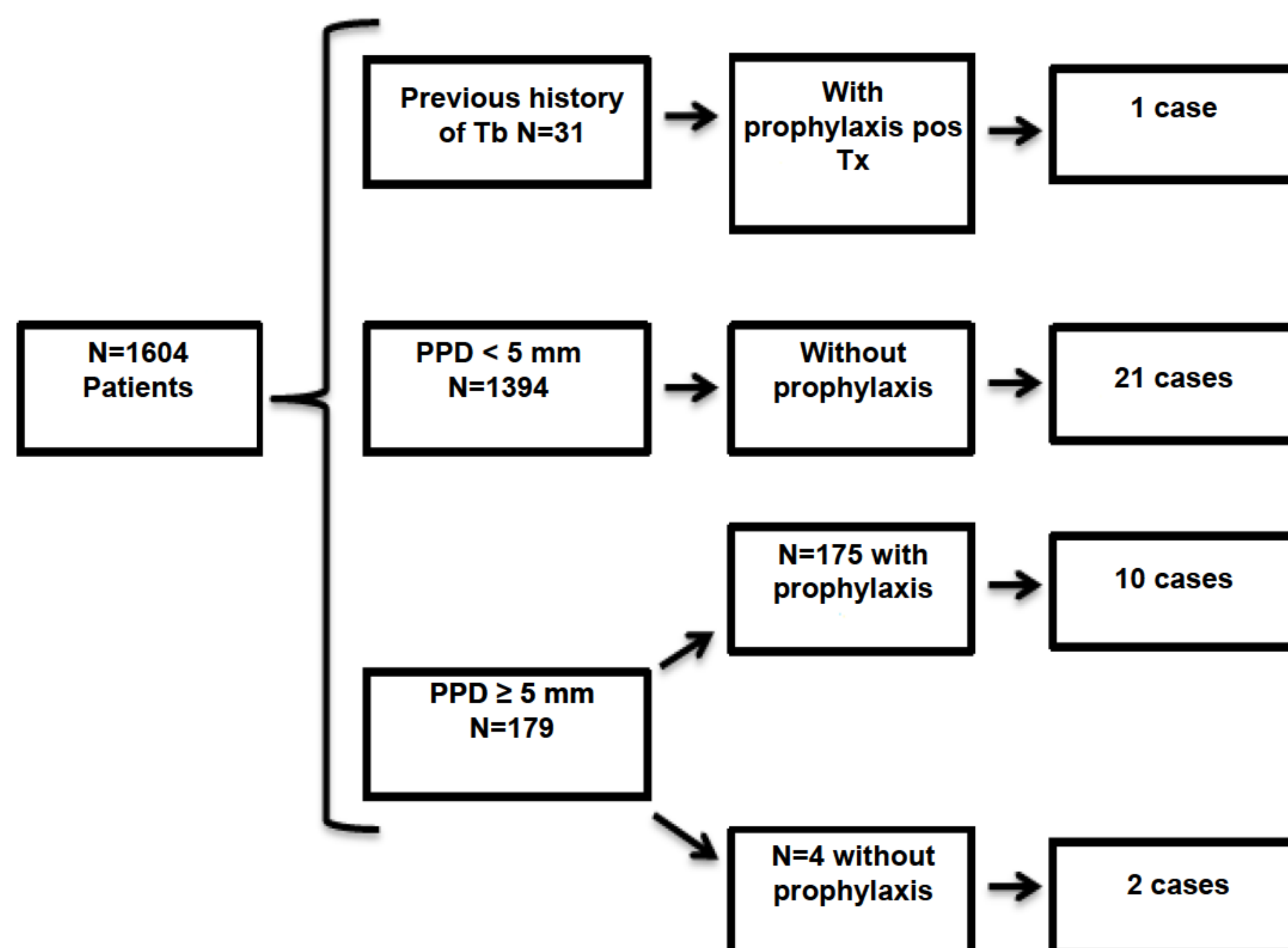
Methods

This is a retrospective cohort study including all patients undergoing kidney transplantation between January 1994 and November 2014 at the General Hospital of Fortaleza, Northeast Brazil. Patients with clinical and laboratory diagnosis of at least one of the following NTDs: tuberculosis (TB), dengue, visceral leishmaniasis (VL), leprosy or disseminated strongyloidiasis were included. Renal function was assessed before, during and after NTDs and was made the classification according to RIFLE, AKIN and KDIGO scores, analyzing the occurrence of AKI and its outcome.

Results

A total of 1,777 kidney transplants were performed during the study period. NTDs found were: TB (34 cases), Dengue (11 cases), VL (6 cases), leprosy (2 cases) and disseminated strongyloidiasis (1 case). TB prophylaxis was performed in patients with previous history of TB or tuberculin skin test ≥ 5 mm, except in 4 patients.

Fig.1: Tuberculosis cases after renal transplantation



Results

In patients with TB and VL significant changes in the mean values of serum creatinine and glomerular filtration rate were observed, when comparing the mean values before and during infection course ($p < 0.05$), characterizing the occurrence of AKI. In patients with dengue, no significant changes were observed.

Fig.2: Changes in glomerular filtration rate levels (GFR) in 34 patients with post renal transplant tuberculosis

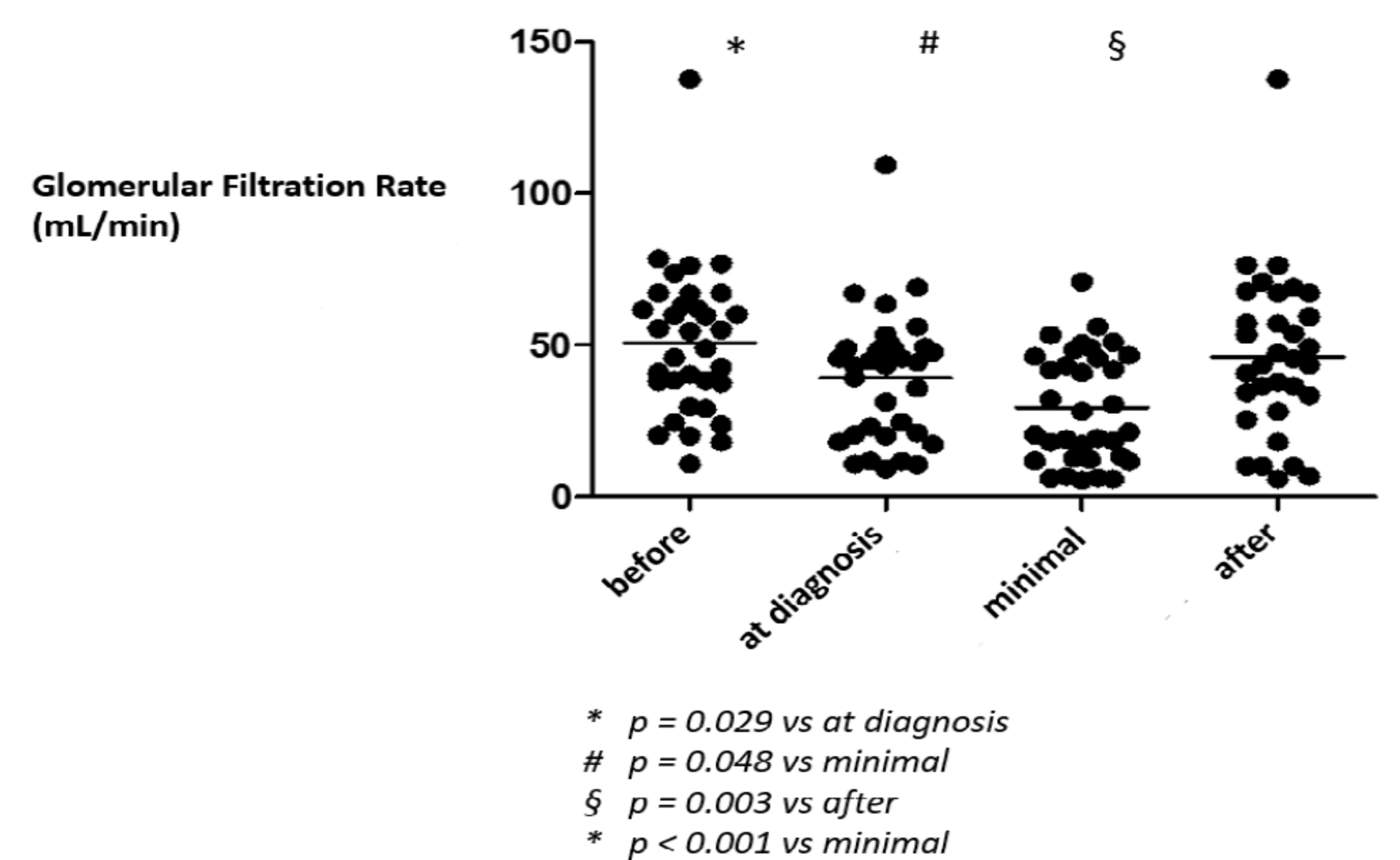
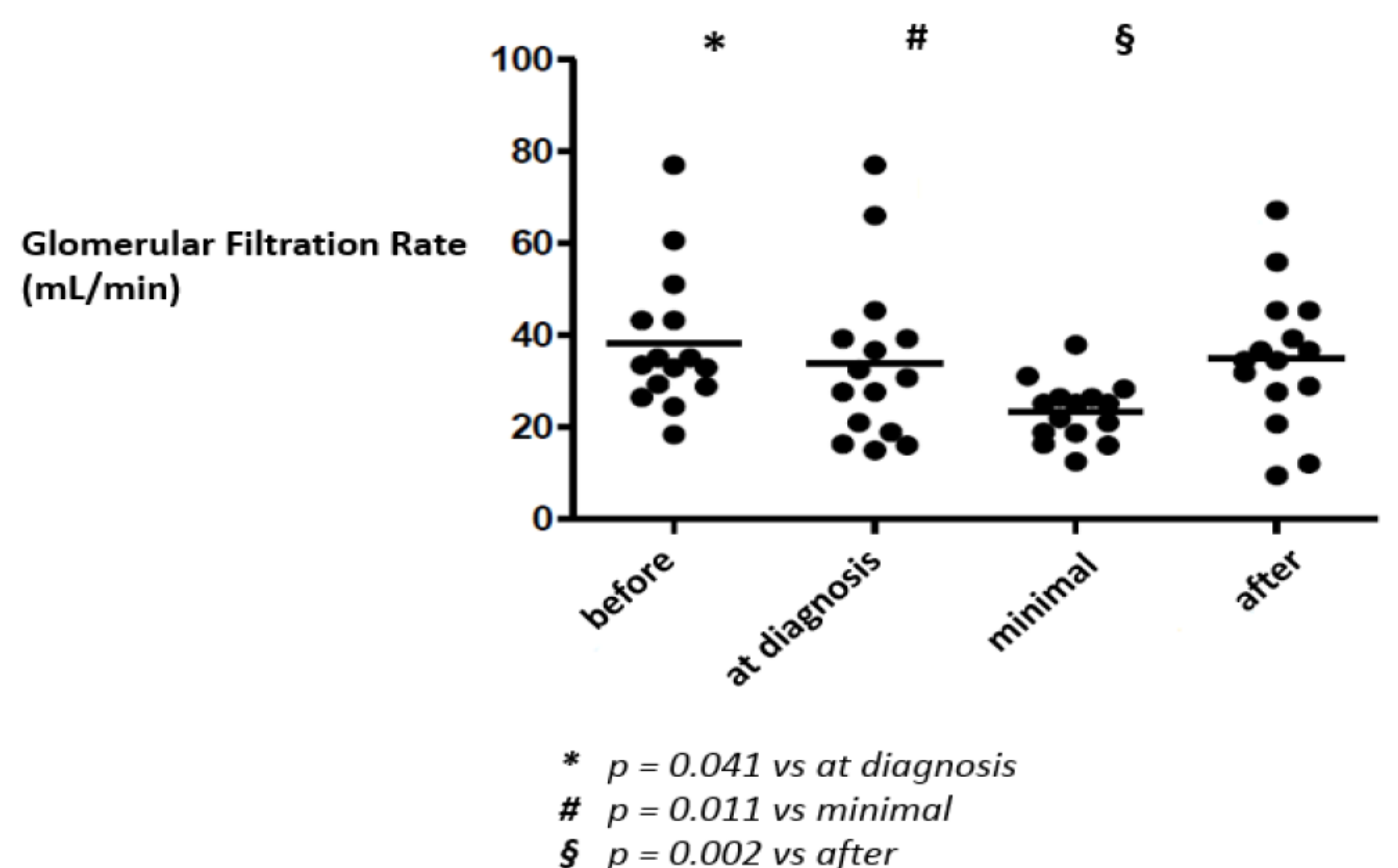


Fig.3: Changes in glomerular filtration rate levels (GFR) in 15 patients with post renal transplant visceral leishmaniasis



Conclusions

High-risk patients for TB not undergoing prophylaxis have a higher incidence of post renal transplant TB. AKI is common in transplant patients affected by NTDs, specially TB and VL.

References

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