



# Analysis of regulatory T cell subsets in the peripheral blood of immunoglobulin A nephropathy (IgAN) patients

S. Yang, B. Chen, J. Shi, F. Chen, J. Zhang and Z. Sun

Department of Nephrology, Huaihe Hospital of Henan University, Kaifeng, China

Corresponding author: B. Chen  
E-mail: [baopingchencn@126.com](mailto:baopingchencn@126.com)

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**ABSTRACT.** The aim of this study was to investigate the clinical significance of regulatory T cells (Tregs) and its subsets in immunoglobulin A nephropathy (IgAN) patients. Peripheral blood samples of 20 IgAN patients and 20 healthy individuals of similar ages were analyzed. Levels of Tregs and its subsets, namely nTregs and iTregs, were analyzed using flow cytometry. The number of Tregs in IgAN patients was significantly lower than that in the healthy controls. While significant reduction in iTregs primarily contributed to this effect ( $P < 0.01$ ), nTreg levels did not significantly change ( $P > 0.05$ ). The levels of serum IL-17, IL-10 and TGF- $\beta$  were detected by ELISA method. The levels of IL-10 and TGF- $\beta$  in IgAN patients were lower ( $P < 0.05$ ), whereas those of IL-17 in the IgAN group were higher ( $P < 0.05$ ) than those in the controls. In conclusion, the change in Tregs count in the peripheral blood of IgAN patients is mainly caused by the reduction in iTregs, suggesting a substantial role in the prognosis and treatment of IgAN.

**Key words:** Immunoglobulin A nephropathy; Regulatory T cells; Subset