

EXPRESSION OF ANGIOPOIETIN ON THE KIDNEY TRANSPLANT WAITING LIST: A SINGLE CENTER STUDY

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Objective: Angiotensin-2 (Ang-2) is a growth factor belonging to the angiotensin (Ang)/Tie signaling pathway. Plasma levels of especially Ang-2, are thought to be significantly increased in patients with acute kidney injury (AKI), independent of inflammation. Ang-2 is also important in dialysis and transplantation, as it plays an important role in the disruption of endothelial homeostasis. In our study, it was aimed to investigate the relationship between anti-HLA antibody and Ang levels in patients with end-stage renal disease (ESRD) who are on the organ transplant waiting list.

Methods: 80 ESRD patients who were on the waiting list between 2018 and 2020 and whose panel reactive antibody (PRA) screening and identification test were studied, participated in our study. First, the PRA screening test was performed on the patients, and the class I-II identification tests were studied on the patients who were positive for PRA. Ang-2 level was evaluated by ELISA method. The relationship between Ang-2 levels and PRA percentages in PRA positive and negative patients was evaluated.

Results: A positive correlation was found between anti-HLA antibody and Ang-2 levels in patients with ESRD and a statistically significant increase in Ang-2 level was found in patients with PRA $\geq 50\%$ positive. This finding suggests that Ang-2 may have an important role in the progression of chronic renal failure and may be effective in predicting graft survival after transplantation.

Conclusions: Further studies will be required to evaluate the pathogenic role of Ang-2 in renal progression and to improve kidney function by targeting Ang-2.