

## **TREATMENT WITH CILOSTAZOL, A PHOSPHODIESTERASE INHIBITOR, IN CHRONIC KIDNEY DISEASE MIGHT RETARD RENAL PROGRESSION**

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**BACKGROUND/ AIMS:** In clinical interventions of chronic kidney disease (CKD), we should control cardiovascular events vigorously. However, we always neglect to manage peripheral arterial disease (PAD). Besides conventional treatments, we add on cilostazole in CKD patients, especially in those suspected of having PAD, which might have extra benefit on kidney protection or slow down renal disease progression.

**METHODS:** CKD patients who had major symptoms of PAD were recruited and underwent ankle-brachial index (ABI) assessment. They were divided into 2 groups. Patients whose ABI < 0.9 (suspected PAD) were included in group 1 (n=12), and besides usual treatments received add-on cilostazol 50 mg twice a day for 8 weeks. Group 2 (n=28) patients took conventional medications as usual.

**RESULTS:** We enrolled 40 patients within a 6-month study period, their ages ranging from 45 to 85 years (mean  $\pm$  SD 66.58  $\pm$  11.29 years). Positive rate of PAD was 30%. We found no significant difference in sex and body mass index between both groups, but prevalence of PAD increased with age (p<0.0001 by Mann-Whitney U test ). The renal function change, by  $\Delta$  serum cr or by  $\Delta$  Ccr, in the patient group taking cilostazol was statistically lower than that in the patient group not taking cilostazol (p<0.05 by Mann-Whitney U test ).

**DISCUSSION/CONCLUSIONS:** In conclusion, cilostazol has a beneficial effect on kidney protection and retards renal progression in CKD patients, which possibly results from its antiplatelet, vasodilating, and adenosine uptake-inhibiting effects.

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**Key words:** cilostazol, peripheral arterial disease, chronic kidney disease, kidney protection