THE CLINIC RESEARCH ON EFFECT OF COMBINED TREATMENT BY BENIDIPINE AND IRBESARTAN ON RENAL FUNCTION IN PATIENTS WITH ESSENTIAL HYPERTENSION

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Objectives To examine the effect of benidipine and irbesartan used individually or in combination on renal function in patients with essential hypertension (EH).

Methods Sixty-six cases with EH were divided randomly into three groups: benidipine (4 mg qd, n=22), irbesartan (150 mg qd, n=22) and combined treatment (benidipine 4 mg qd+ irbesartan 150 mg qd, n=22). Treatment lasted for 24 weeks. Parameters of renal function were measured before and after treatment.

Results
1. After treatment, urinary albumin excretions were significantly less than those before treatment in all the three groups (urinary albumin excretion mg/24 h, 24 h urine protein g/L, uβ2-MG, all p<0.01). Magnitude of decrease of urinary albumin excretion in the combined treatment group was higher than those in the benidipine and irbesartan groups (urinary albumin excretion mg/24 h: all p<0.05; 24 h urine protein g/L, uβ2-MG, all p<0.01). No significant difference was found between benidipine and irbesartan groups (p>0.05). After treatment GFR was increased in the combined treatment and perindopril groups, no significant change was observed in the benidipine group (p<0.05, <0.05, and >0.05, respectively).
2. No significant correlation between the magnitude of decrease of urinary albumin excretion and that of SBP or DBP was found among all the three groups (p>0.05).

Conclusions The data suggest that benidipine combined with irbesartan treatment has additive effect on the decrease of urinary albumin excretion and protection of renal function.