Effects of spironolactone on resistant hypertension: A randomized, single-blind and placebo-controlled clinical trial

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To evaluate the efficacy and safety of spironolactone on resistant hypertension (RH). Methods: Patients with RH were enrolled and randomly divided into observation group (58 cases) and control group (66 cases) groups. Patients in observation group were treated with spironolactone, 20-40 mg/d based on regular triple anti-hypertensive regimen, while those in the control group were given regular triple anti-hypertensive regimen plus placebo. All patients were treated with diuretics. Blood pressure, serum potassium and serum creatinine were checked the first week of treatment, 1, 3 and 6 months of treatment. Results: After 1 month of treatment, spironolactone showed slight depressurization, which gradually became obvious later. Changes in SBP and DBP were significant, after 1, 2 and 3 months of treatment ($P$ all < 0.05). Serum $K^+$ level of the observation group was significantly increased, significant difference in serum $K^+$ level was observed between the two groups after 1, 2, 3 months of treatment ($P$ all < 0.05). But the creatinine level of the observation group slightly increased showing significant difference comparing with the control group although they were both in the normal range ($P$ all < 0.05). Conclusions: Spironolactone is effective and safe for patients with resistant hypertension under regular follow-up and close monitoring.

[KEY WORDS] Spironolactone; Resistant hypertension; Clinical trial