

A Comparison of the Aldosterone-blocking Agents Eplerenone and Spironolactone

Allan Struthers, et al.: *Clin Cardiol* 2008;31:153–158

To the Editor:

Struthers et al,¹ concludes that both eplerenone and spironolactone are effective and safe in the treatment of hypertension and heart failure, but there is no direct comparison of the 2 drugs.

We showed, for the first time, that eplerenone is as effective as spironolactone in the management of patients with bilateral idiopathic hyperaldosteronism (IHA).² In a prospective, randomized, parallel-group, open-label, blinded-endpoint study, 34 patients with IHA were assigned to either eplerenone (50 up to 200 mg/daily) or spironolactone (50 up to 400 mg/daily) for 24 weeks. In the majority of patients (82.4% on eplerenone and 76.5% on spironolactone) blood pressure was normalized with monotherapy. Serum potassium levels were normalized in all patients at 4 weeks. There was no case of severe hyperkalemia, whereas mild hyperkalemia was observed in 5 patients, 2 in the spironolactone group and 3 in the eplerenone group. Subsequent dose decrease normalized the serum potassium levels after 1 week in all cases.

Spironolactone has progesterone-like and antiandrogenic adverse effects due to nonspecific binding to steroid receptors and may cause painful gynecomastia, erectile dysfunction, and decreased libido in men and menstrual

irregularity in women.^{1,3} In contrast, eplerenone has higher selectivity for the aldosterone receptor. In our study, 2 patients in the spironolactone group developed bilateral painful gynecomastia, which completely resolved after switching to eplerenone.

In conclusion, the absence of severe adverse effects may improve compliance with eplerenone, but its use should be weighed against higher cost and the scarcity of data on its long-term effects in patients with IHA.

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