Effectiveness of Adrenalectomy and Aldosterone Antagonists for Long-Term Treatment of Primary Aldosteronism

To the Editor:

The data published by Rossi et al provide additional evidence for the well-established efficacy of mineralocorticoid receptor (MR) blockers for the treatment of autonomous hyperaldosteronism whether caused by an aldosterone-producing adenoma or bilateral adrenal hyperplasia. The data are interpreted as showing a better outcome for adrenalectomy for patients with an aldosterone-producing adenoma than for MR blocker therapy for those with bilateral adrenal hyperplasia in the provision of a cure (42% versus 0) and the number of antihypertensive drugs needed for the long-term control of hypertension (1.76 versus 2.73).

However, at follow-up the adrenalectomized aldosterone-producing adenoma patients had a high prevalence of inappropriate left ventricular hypertrophy, as did the MR blocker–treated patients with bilateral adrenal hyperplasia (49.5% versus 50.8%). Because such inappropriate left ventricular hypertrophy has been shown to be associated with an increase in cardiovascular events, the superiority of surgery over medical therapy remains unproven, despite the statement that their data “might suggest the superiority of adrenalectomy over medical therapy in regressing left ventricular hypertrophy.”

Rossi et al also state that their “results provide an explanation for the improved prognosis of those submitted to adrenalectomy,” quoting the results of observational study of mortality by Reinke et al in treated primary aldosteronism. However, in the study of Reinke et al, 47% had adrenalectomy and 53% were treated medically with no indication of a superiority of either mode of treatment.

In addition, the data of Rossi et al shown in Figures 1 and 4 of continued increases in atrial fibrillation in the treated patients suggest that relief of autonomous hyperaldosteronism does not provide protection against this bothersome complication.

In the larger scenario, Funder has shown the inadequacy of the current evaluation and treatment of primary aldosteronism as practiced by Rossi et al, stating that “We do not have the resources to diagnose primary aldosteronism but we have the ability to treat it,” alluding to the routine use of MR blockers in all hypertensive patients.

The need for adequately managing all patients who have primary aldosteronism, 11.2% of the referred patients seen by Rossi et al, imposes an impossible burden on both practitioners and patients. The adoption of Funder’s recommendation provides a probable solution. Moreover, the current management, including aldosterone:renin ratios, confirmatory suppression testing, adrenal venous sampling, and laparoscopic adrenalectomy, costs $32,000 in our setting, whereas the cost of MR blocker therapy is $40 per year. Both money and complications can be saved by routine use of MR blockers as advocated by Funder and further documented by Rossi et al.

Disclosures

None.

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