Spironolactone Use to Treat Hypertension: in the Right Patient Groups at the Right Time

Yusuf Ziya Şener, Cem Çöteli and Metin Oksul

To the Editor:

We read the article which was about first-line use of spironolactone as monotherapy in the treatment of stage 1 essential hypertension published by Attar et al. with great interest.1

Angiotensin converting enzyme inhibitors, angiotensin receptor blockers, calcium channel blockers and thiazide diuretics are suggested to be preferred as first-line treatment in patients with stage 1 essential hypertension. Spironolactone is recommended in patients with resistant hypertension which is defined as uncontrolled blood pressure despite three antihypertensive drug combinations including a diuretic.2

Spironolactone is a mineralocorticoid receptor antagonist and causes anti-androgenic side effects.3 These anti-androgenic effects can be miserable in males but spironolactone can be a good option for women with polycystic ovary syndrome (PCOS) in whom excess androgens lead to menstrual abnormalities, hirsutism and infertility.4 There are conflicting data about the effects of spironolactone on glucose metabolism. Spironolactone increases HbA1C levels and has negative effects on glucose metabolism in patients with heart failure and diabetes while it has positive effects on glucose metabolism in patients with hyperandrogenism.5 Mineralocorticoid receptors are expressed in osteoblasts and osteoclasts and they are supported to play role in glucocorticoid related osteoporosis.6

By the light of these data, first-line use of spironolactone in stage 1 essential hypertension doesn’t seem rational due to having other efficient options with less and tolerable side effects. Spironolactone should be preferred in selected patient groups including patients with heart failure, osteoporosis and in patients who can benefit from antiandrogenic effects of the drug such as patients with PCOS or prostat carcinoma.

REFERENCES