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Patients with diabetes may develop mineralocorticoid receptor (MR) related hypertension due to abnormal activation of MR, thus MR blocker (MRB) is used for the treatment of hypertension in patients with diabetes. Although this selective MRB esaxerenone (Esax) approved for hypertension, the effectiveness of Esax in daily clinical practice has not been proven in hypertensive patients with type 2 diabetes (T2D) or those with impaired glucose tolerance (IGT). The aim of this study is to clarify the efficacy of Esax in these patients. In this retrospective study, patients who initiated Esax from May 2019 to February 2020 and those who initiated amlodipine (Aml) were screened. After excluding patients with a history of hypersensitivity to these drugs,  $K > 5.0$  mEq/L at the baseline and severe renal dysfunction ( $eGFR < 30$  mL/min/1.73m<sup>2</sup>), and patients receiving potassium preparations, 35 and 70 patients were enrolled in the Esax and Aml group, respectively. After propensity score matching with the parameters including gender, age, body mass index (BMI), concomitant use of angiotensin receptor blocker, systolic blood pressure (SBP), diastolic blood pressure (DBP), K, AST, ALT, TG and eGFR, finally each 24 cases were analyzed. Primary endpoints were changes ( $\Delta$ ) in SBP and DBP from the baseline to 6 months after the initiation of the drugs. Secondary endpoints comprised changes in liver enzymes and those in lipid metabolism markers. Unpaired t-test was used for statistical analysis. The dose of Esax and Aml were  $2.2 \pm 0.5$  mg and  $4.1 \pm 1.2$  mg at the baseline, and  $3.4 \pm 1.3$  mg and  $5.3 \pm 1.2$  mg at 6 months, respectively. SBP was more decreased in the Esax group compared with the Aml group ( $\Delta$ SBP:  $-27 \pm 20$  mmHg vs  $-11 \pm 14$  mmHg,  $p < 0.05$ ). DBP was not significantly different between the two groups ( $\Delta$ DBP:  $-11 \pm 10$  mmHg vs  $-9 \pm 14$  mmHg). In the Esax group, ALT and TG were significantly decreased ( $\Delta$ AST:  $-7.3 \pm 11.5$  U/L vs  $+0.9 \pm 9.5$  U/L,  $p < 0.05$ ,  $\Delta$ TG:  $-14.3 \pm 51.0$  mg/dL vs  $+33.5 \pm 59.4$  mg/dL,  $p < 0.05$ ), and HDL-C significantly increased ( $\Delta$ HDL:  $+1.8 \pm 6.1$  mg/dL vs  $-3.8 \pm 4.8$  mg/dL,  $p < 0.05$ ). Severe adverse events were not observed in any subjects. These results suggest the efficacy of Esax for controlling blood pressure as well as the plausible benefit in liver disease and lipid metabolism in hypertensive patients with T2D or IGT.

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## Diabetes & Glucose Metabolism

### ODP190

#### *Efficacy of Esaxerenone on Hypertensive Patients with Type 2 Diabetes or Those with Impaired Glucose Tolerance*

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