

Effectiveness and safety of eplerenone in ischemic cardiomyopathy with reduced ejection fraction. Clinical preliminary experience in a multidisciplinary unit

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Summary

Introduction: mineralocorticoid receptor antagonists have been shown to be beneficial in patients with symptomatic heart failure and reduced ejection fraction. However, little evidence is available regarding its hemodynamic effects and, at the same time, there are no loco-regional reports on its use in real clinical practice. Our preliminary experience analyzed the medium term effectiveness and safety profile of eplerenone in patients with ischemic cardiomyopathy and reduced ejection fraction. **Material and methods:** a prospective open study was performed in a convenience sample of patients treated in a heart failure unit with acute myocardial infarction and left ventricular ejection fraction $\leq 40\%$. Eplerenone was prescribed in doses adjusted to the glomerular filtration rate combined with the usual chronic therapy agents based on clinical practice guidelines. Each patient performed as his own control at 6 months with serial measurements in clinical, laboratory, structural and hemodynamic variables and in the quality of life and adherence tests (Minnesota questionnaire and Morisky-Green scale). **Results:** we included 26 patients, 73% men, with an age of 66.3 ± 9.7 years. No changes were observed in the clinical variables during midterm follow-up. An increase of left ventricular ejection fraction ($29.4\% \pm 7.2\%$ to $32.0\% \pm 7.4\%$, $p = 0.02$) and cardiac output (4.1 ± 1.1 l/min to 4.9 ± 1.0 l/min, $p = 0.0007$) and a decrease in systemic vascular resistance (1669.8 ± 544.2 dynes.s/cm⁵ to 1248.4 ± 350.6 dynes.s/cm⁵, $p = 0.01$) were observed. Although the use of eplerenone was associated with an increase in potassium levels and a decrease in the glomerular filtration rate, there were no hospitalizations or deaths at 6 months. In addition, eplerenone was associated with an improvement in quality of life (Minnesota score: 17.5 to 10.0 points, $p = 0.02$) and good adherence to treatment.

Conclusion: the use of eplerenone was associated with an improvement in the hemodynamic profile and quality of life, good safety and adequate adherence to treatment in the midterm in patients with ischemic heart failure and reduced ejection fraction. Large series evaluated through longer follow-up should compare hemodynamic effects among subpopulations of patients with heart failure of different etiologies.

Key words: HEART FAILURE INFARCTION EFFECTIVENESS SAFETY