Use of sacubitril-valsartan in heart failure with reduced ejection fraction: real world experience

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Introduction: Sacubitril/Valsartan (Sac/Val) significantly reduces hospitalizations and mortality of heart failure patients (pts) with reduced ejection fraction (HFrEF). Considering that real world evidence is still scarce, it’s important to report our experience regarding safety and efficacy of this drug, after approximately one year of its introduction in Portugal. Methods: From November 2017 to January 2019, 74 patients (pts) were switched from Angiotensin-Converting Enzyme Inhibitor/Angiotensin Receptor Blocker (ACEI-ARB) to Sac/Val. Data of 66 pts (80% men), with ischemic etiology (61%) and left ventricular ejection fraction (LVEF) of 28,9 +/-6,8% were retrospectively analyzed. Mean age was 71,4 +/-12,0 years old. At the start of therapy with Sac/Val, 50% of pts were in NYHA class II, 39,3% in NYHA class III and 6% in NYHA class IV. Mean NTproBNP before the switch of therapy was 5888,6 +/- 5846,1 pg/ml. Considering ESC guideline Class I Recommendation for HF therapy, 92% of pts were using betablockers, 91% ACEI/ARB, 61% mineralocorticoid/aldosterone receptor antagonist, 74% loop diuretics and 15% ivabradine. Seventeen percent had CRT and 21% ICD. In 31 pts (46,9%), initial Sac/Val dose of 24/25mg bid was not augmented. In 36,3% of pts was possible to achieve an intermediary dose of 49/51mg bid and in 15,1% the maximum dose was achieved. Clinical efficacy (HF hospitalization, death, NYHA class improvement), safety (arterial pressure, serum potassium, creatinine), NTproBNP and echocardiographic (LVEF) parameters were analyzed. Results: There was an improvement of NYHA class, with only 2 (3%) pts remaining in NYHA class IV. Two (3%) pts had worsened NYHA class. Among the remaining pts, 34 (51,5%) improved NYHA class. There were 4 (6%) unplanned hospitalizations for HF after switch of therapy and there were 2 deaths of refractory HF. About safety concerns, sac/val had been discontinued in 1 pt because of hypotension, and in another one because of worsening renal function. In 62 pts there were no major events associated with therapy switch: mean arterial pressure was 125,9 +/-18,7 mmHg, serum potassium (4,5+/-0,4 mmol/L) and renal function (Cr 1,2+/-0,4mg/dl) remained stable. There wasn’t any report of angioedema. LVEF after switch therapy improved from 28,9 +/-6,8 to 37,5 +/-9,0%. Conclusion: Therapy with Sac/Val, when associated to other ESC guideline Class I Recommendation HF therapies, was effective in improving NYHA class and reducing hospitalizations being associated to low risk of complications.