Abstract: P1018

The impact of the use of sacubitril/valsartan on clinical and echocardiographic parameters in heart failure patients

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Topic(s):
Chronic Heart Failure: Pharmacotherapy

Citation:
Background:
Sacubitril/valsartan is a guideline-recommended alternative drug to Angiotensin-Converting enzyme inhibitors (ACEIs) or Angiotensin II Receptor Blockers (ARBs) to reduce morbidity and mortality in patients with chronic heart failure with reduced ejection fraction (HFrEF). Recent guideline update specifically advises switching symptomatic HFrEF patients to sacubitril/valsartan for further reduction of morbidity and mortality.

Purpose:
The aim of the work was to demonstrate the clinical effects of the use of sacubitril/valsartan instead of the conventional ACEIs or ARBs in HFrEF patients.

Methods:
A total number of 23 patients with miscellaneous causes of heart failure (14 patients had ischemic etiology, 8 patients had dilated cardiomyopathy and 1 patient had peripartum cardiomyopathy) presented in the setting of heart failure (NYHA III-IV) with normal creatinine clearance. Through clinical examination and baseline 2D transthoracic echocardiography (TTE) was done with an emphasis on left ventricular ejection fraction (LVEF) and end diastolic volume (EDV). All patients received sacubitril/valsartan instead of ACEs inhibitors or ARBs together with beta-blockers, diuretics and Mineralocorticoid antagonists when indicated. Follow-up after 6 months was done to assess patient clinical status as regards heart failure symptoms and follow up TTE as regards LVEF and EDV.

Results:
The mean age of the patients was 46.89 ± 15.4 years, 14 patients (60.87 %) had a baseline NYHA III while 9 patients (39.13%) had NYHA IV. Mean baseline LVEF and EDV were 27.3% ± 8 and 277.11 ± 57.67 ml respectively. At 6 months follow-up, 21 patients (91.3%) had NYHA I while 2 patients had NYHA II (8.7 %), mean LVEF and EDV were 49.05% ± 10.27 and 202.79 ± 64.86 ml respectively. (P<0.001)

Conclusion:
According to this small case series, the use of sacubitril/valsartan was not only associated with improvement of heart failure symptoms but also it was linked to evident improvement of TTE parameters in the form of improved LVEF and reduced EDV at 6-months follow-up.
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