THE FIRST RESULTS FROM THE OPTIMIZE HEART FAILURE CARE PROGRAM

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Heart failure (HF), as one of the leading causes of death and disability, is an important problem for health care systems around the world. Due to the high rates of hospitalization, readmission, and outpatient visits, the disease continues to remain a costly condition; the management of which requires many human and economic resources. In this regard, the search for strategies to optimize the management of the HF patients is particularly relevant.

At the 2017 HFA congress in Paris, the first results of the Optimize Heart Failure Care Program (Optimize Program; www.optimize-hf.com) were presented. The Optimize Program, a global initiative that currently covers 45 countries, is devoted to improving the outcomes following HF hospitalization by using patient education, engagement, and postdischarge planning. All participating hospitals were provided with examples of best practice protocols developed for optimizing HF management based on the latest recommendations from the ESC HF guidelines, pre- and post-discharge checklists, a patient HF passport, and a smartphone application to improve the patients’ understanding of HF and encourage their involvement in HF care and treatment adherence.

THE OPTIMIZE PROGRAM IN HOSPITALS WITHOUT A MULTIDISCIPLINARY HF PROGRAM

Saldarriaga et al described the impact of implementing the Optimize Program in hospitals without a multidisciplinary HF program. Of the 436 HF patients included in this study, 192 and 244 were recruited from hospitals with and without a multidisciplinary HF program, respectively. Thirty days after discharge from the hospital, the composite outcome of decompensation plus hospitalization was 2.2% vs 3.3% (P=0.530) in hospitals with and without a multidisciplinary HF program, respectively. The authors concluded that, in hospitals without a multidisciplinary HF program, the implementation of the Optimize Program improved the short-term prognosis in patients with HF, and it is a good strategy to standardize the management approach in all types of hospitals as part of a quality-improvement initiative.
PRESCRIPTION RATES FOR GUIDELINE-RECOMMENDED HF TREATMENT

The inclusion of eight post–Soviet countries (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Russia, Ukraine, and Uzbekistan) in the Optimize Program allowed, for the first time in this region, the prescription rates for guideline-recommended medications for HF treatments (ie, ACE inhibitors/ARBs, β-blockers, MRAs, and ivabradine) to be analyzed. A total of 800 patients from the participating countries who were hospitalized due to worsening HF were included in the study (mean age, 62.4±0.4; 69.6% male; NYHA class II-IV; 78.7% in sinus rhythm). At discharge from the hospital, the prescription rates for ACE inhibitors/ARBs, β-blockers, MRAs, and ivabradine were 91.2%, 90.4%, 92.3%, and 29.0%, respectively. The prescription rates for these agents remained high throughout the 12-month follow-up. Diuretics and digoxin were used in 72.2% and 7.2% of patients with HF, respectively. However, the proportion of patients receiving the target doses and ≥50% of the target dose was low (25.4% and 43.5% for ACE inhibitors/ARBs, 21.1% and 47.2% for β-blockers, and 51% and 26.2% for ivabradine). Moreover, patients with HF who were treated with ≤50% of the target doses of ACE inhibitors/ARBs and β-blockers had a high rate of hospital readmission for worsening HF compared with the patients receiving the target doses (38% vs 35.1% and 19.3% vs 20.3%, respectively; P<0.05 for both). Despite the fact that the prescription rates for these HF medications were satisfactory and comparable with the data from other countries, additional efforts are needed to improve the implementation of the HF guidelines in clinical practice.

INITIATION OF IVABRADINE IN THE VULNERABLE PHASE OF HF

Several groups participating in the Optimize Program demonstrated that the early initiation of ivabradine therapy during the vulnerable phase of HF improved the NYHA functional class, LV systolic function, and, most importantly, the outcomes following the HF hospitalization. Within the scope of the Optimize Program in Colombia, the efficacy of an early initiation of ivabradine therapy in patients with HF was studied. Among 436 HF patients (68% male; mean age, 66 years; mean LVEF, 32%; 94% were on β-blockers), 61.4% were followed up in an outpatient service 30 days after discharge from the hospital. Ivabradine therapy, which was started in HF patients (n=131) during the vulnerable phase, improved LVEF (+5% vs 0% in the group without ivabradine; P=0.005) and NYHA functional class by at least one class (42% vs 12%; P=0.0001), and it reduced the composite end point of decompensation plus HF hospitalization (1.53% vs 8.57%; P=0.009).

EFFECTS OF β-BLOCKERS AND IVABRADINE ON HF HOSPITALIZATIONS

The effect of a β-blocker and ivabradine combination vs β-blockers alone in patients in sinus rhythm hospitalized due to worsening HF was analyzed. This analysis included data collected over 12 months from 414 patients in sinus rhythm
hospitalized due to worsening HF (mean age, 61.8±0.9; 74.6% male; NYHA classes II-IV; LVEF <40% [mean, 28.7%±0.5%]). In total, 37.2% of hospitalized HF patients received a β-blocker and ivabradine combination and 62.8% received β-blocker therapy alone. There were no differences regarding age, sex, NYHA functional class, and LVEF between the two groups of patients; however, the baseline heart rate in HF patients on a β-blocker and ivabradine combination was significantly higher than in the patients on β-blockers alone (88.9±1.3 bpm vs 78.6±0.9 bpm; P<0.05). After a 12-month follow-up, the rate of repeat hospitalizations due to worsening HF was significantly lower in the patients receiving a β-blocker and ivabradine combination compared with β-blocker therapy alone (9.1% vs 30.4%; P<0.01).

HEART FAILURE WITH MIDRANGE EJECTION FRACTION

Kurlianskaya et al investigated the effects of pharmacological treatments and patient education on the rate of hospitalization due to worsening HF in patients with HFMEF. The study included 93 HF patients with NYHA classes I-IV and an LVEF of 40% to 49%. The average number of rehospitalizations due to worsening HF in patients who started a coadministration of β-blockers and ivabradine before discharge from the hospital was lower compared with the patients on β-blockers alone (0.8 and 9.0, respectively; P=0.028), especially among patients classified as possessing a high learning capacity. The authors concluded that both a dynamic education of patients with HF and pharmacological treatments that included ivabradine positively affected the course of the disease, as evidenced by the significant decrease in the rate of hospital readmission for HF within the 12-month follow-up.

CONCLUSION

The first results of the Optimize Program have clearly demonstrated the benefits of simple clinician- and patient-focused tools, which are raising awareness about HF and improving the current approaches to the management of HF patients. For the first time, it was shown that optimizing HF management, particularly heart rate-lowering therapies during the vulnerable phase of HF, reduces the rate of death and rehospitalizations. Further results, which will be obtained during the implementation of the Optimize Program in different parts of the world, may provide the basis for the development of new tools and strategies for the management of patients with HF.
REFERENCES


