Title: Adherence to Guidelines in the Management of Heart Failure Patients with Reduced Ejection Fraction

Category: Heart Failure and Cardiomyopathies

Abstract

Background: Patients with heart failure with reduced ejection fraction (HFrEF) are required to be on guideline directed medical therapy (GDMT), including but not limited to Beta blockers and renin-angiotensin-aldosterone system (RAAS) inhibitors, to reduce morbidity and improve survival.

The aim of this study is to evaluate adherence of the heart failure service team to the GDMT within the first dedicated Heart Failure program in the UAE, based at Cleveland Clinic Abu Dhabi (CCAD) in regards to using beta blockers and RAAS inhibitors.

Method: Data were collected retrospectively from CCAD heart failure database for patients discharged from the hospital anytime between the 1/1/2018 to 11/4/2019. One hundred twelve admissions in 71 patients who met the following inclusion criteria were included:

- Patients admitted with acute decompensated HFrEF (EF \( \leq 40\% \))
- Patients admitted to inpatient service of advanced HF team
- Patients discharged between the 1/1/2018 to 11/4/2019

Exclusion criteria were:

- Patients who expired during the admission
- Patients who had an LVAD or heart transplant during the admission at any point
- Patients who were deemed end-stage and discharged on palliative care with inotropic therapy

Results:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N=71 (%)</th>
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<tbody>
<tr>
<td>Diabetes</td>
<td>54 (76.1%)</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>53 (74.6%)</td>
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<tr>
<td>Hypertension</td>
<td>56 (78.9%)</td>
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</tbody>
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After discharge, patients were evaluated and results were organized into three groups:

- Patients who conformed to the standards
  - In 79 (70.5%) admissions of the total 112, the patients were discharged on a combination of a beta blocker and RAAS inhibitor.
- Patients who did not conform to the standards, but met the exception
In 33 (29.5%) of the 112 admissions, contraindications to one or both classes of medications were present.

- Patients who neither conformed to the standards nor met the exception criteria
  - No patients fell under this criterion

All patients without contraindication to either class of medications were discharged on both blockers and RAAS inhibitors.

**Conclusion:** At CCAD, the use of beta blockers and RAAS inhibitors for patients with heart failure with reduced ejection fraction (HFrEF) is implemented as per currently recommended guidelines.