Top Ten Things To Know
Incremental Reduction in Risk of Death Associated With Use of Guideline-Recommended Therapies in Patients With Heart Failure: A Nested Case-Control Analysis of IMPROVE HF

1. Heart failure caused by damage to the heart that has developed over time can't be cured. But it can be treated, often with strategies to improve symptoms.

2. ACC/AHA clinical practice guidelines for management of patients with heart failure (HF) have long recommended evidence-based therapies for patients with reduced left ventricular ejection fraction (LVEF).

3. Given the delay in translating research into practice, most evidence-based guideline recommendations suggest adding therapies to existing approaches.

4. This study is a nested case-control of patients enrolled in the prospective, longitudinal IMPROVE HF study, which evaluates effectiveness of seven interventions.

5. The pharmacological recommended therapies included in the analysis were:
   - Angiotensin-converting enzyme inhibitors/angiotensin receptor blockers
   - Anticoagulation for atrial fibrillation
   - Aldosterone antagonists
   - Beta-blockers

6. The guideline recommended strategies also included were:
   - Cardiac Resynchronization Therapy
   - Implantable cardioverter-defibrillators
   - Patient education regarding HF signs, symptoms and treatment

7. After propensity matching, logistic regression analyses were performed to determine attributable risk.

8. The study found that four evidence-based, guideline recommended therapies were associated with benefit in the study population, while one was not.

9. The potential for a plateau in the effectiveness of combining therapies is discussed.

10. The data presented here provide rationale for the implementation of guideline-recommended heart failure therapies and spread of performance improvement systems.

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