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Journal Club

BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

October 2023

The following succinct analysis appeared in *Pharmacist's Letter*. Based on vol. 37. No. 2

HEART FAILURE

You'll hear buzz about how to treat heart failure with PRESERVED ejection fraction (HFpEF)...due to anticipated med label updates.

It's different than heart failure with REDUCED ejection fraction (HFrEF), which is from a weak left ventricle that can't pump effectively.

But over half of HF patients have HFpEF...often due to high blood pressure causing a stiff left ventricle that can't adequately fill.

And there's less evidence for how to treat HFpEF.

For example, ACEIs or ARBs might reduce HFpEF hospitalizations...but don't seem to decrease mortality as they do in HFrEF. Beta-blockers don't seem to reduce mortality in HFpEF either.

Now FDA will likely expand approval of spironolactone and *Entresto* (sacubitril/valsartan) to some HFpEF patients. Experts predict labels may specify patients with "mildly reduced" EF, such as about 40% to 50%.

But neither is a "slam dunk" for HFpEF, regardless of label changes.

Limited evidence suggests spironolactone may reduce HFpEF hospitalizations...but only after a reanalysis of the data.

Entresto's HFpEF study only shows benefit when its original endpoint...a reduction in HF hospitalizations or CV death...is expanded to include urgent clinic or ED visits for heart failure.

Weigh downsides. For instance, spironolactone is low-cost, but hyperkalemia is common. *Entresto* costs about \$580/mo...can't be used in patients with prior angioedema...and often causes low BP, even in HFpEF.

First, focus on BP control...it may slow HFpEF progression. Suggest meds based on comorbidities...such as an ACEI or ARB for kidney disease.

Advise cautious use of loop diuretics in HFpEF. Loops may be needed for fluid overload, but overdoing it can worsen symptoms.

Help manage anemia, COPD, obesity, or other conditions that may worsen heart failure symptoms. And stay alert for NSAIDs, alpha-blockers, and other meds with adverse effects in heart failure.

If these steps aren't enough, expect to see spironolactone or *Entresto* tried...especially after a recent heart failure hospitalization.

Anticipate spironolactone if cost is an issue...or *Entresto* instead of an ACEI or ARB if additional BP lowering is needed. It's also okay if HFpEF patients need both spironolactone and *Entresto*.

Get our toolbox, *Improving Heart Failure Care*, for strategies to improve med adherence, resources to educate patients, and more.

(For more on this topic, see Clinical Resource #370205 at PharmacistsLetter.com.)

Solomon SD, McMurray JJV, Anand IS, et al. Angiotensin-neprilysin inhibition in heart failure with preserved ejection fraction. N Engl J Med 2019;381:1609-20.



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DISCUSSION QUESTIONS OVERVIEW OF CURRENT THERAPY

1. What is known about treating heart failure with preserved ejection fraction (HFpEF)?

ANALYSIS OF NEW GUIDELINE

2. What type of study was this? How were the patients selected for inclusion?

- 3. How were the study groups defined?
- 4. How were the outcomes evaluated?
- 5. What were the outcomes of this trial?
- 6. What were the strengths and weaknesses of this trial?



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7. Were the results expressed in terms we care about and can use?

HOW SHOULD THE NEW FINDINGS CHANGE CURRENT THERAPY?

8. Do the results change your practice? How?

APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

WJ is a 68-year-old Caucasian male who presents to your office to establish care. He was recently admitted for dyspnea and diagnosed with heart failure with preserved EF (HFpEF). His discharge medication list includes lisinopril 5 mg daily and metformin 1,000 mg twice daily. His echocardiogram during hospitalization showed an ejection fraction (EF) of 55%. WJ reports he's been feeling well since his hospitalization.

Today, WJ's vitals are BP 150/86, HR 76, O2 sats 97% on room air, BMI 32.

9. How should you manage WJ's HFpEF? What medical therapies have been shown to improve outcomes in patients with HFpEF?

You discuss that WJ's BP remains elevated, and that blood pressure control is an important measure to slow HF progression. You recommend that WJ increase lisinopril to 10 mg daily.

You bring up that it is likely WJ may start to hear commercials promoting certain medications for patients with his type of heart failure, but reinforce that BP control is the most important focus for WJ right now. With this in mind, you also recommend for WJ to monitor his BP at home.

WJ says that this is all new to him. He doesn't have a BP monitor and isn't sure what to do.



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10. How do you educate WJ about home BP monitoring? What kind of monitor should you recommend for use at home?

WJ appreciates the guidance regarding home BP monitoring and agrees that it is a good idea for him. He also asks if there are other measures he should take to prevent another heart failure exacerbation.

11. How do you counsel WJ regarding lifestyle changes?

You discuss lifestyle changes, and reinforce that these modifications are also ways to help him lose weight and control his BP and diabetes. WJ agrees it is especially important for him to work in daily physical activity, as he's been very sedentary since retirement.

At the visit, you also note that WJ had an elevated A1C at 8.1% while in the hospital and was treated with sliding scale insulin. However, he was discharged on his home dose of metformin 1,000 BID.

WJ knows that this A1C is above his goal and asks for your recommendation for additional medications. He would like to avoid medications associated with further weight gain.

12. What are metformin add-on options for WJ?

You discuss the pros and cons of the various options with WJ. He decides he wants to focus on lifestyle changes over the next couple of months instead of adding another medication for diabetes, since he admits his diet and exercise habits could use a lot of improvement.



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Additional Pharmacist's Letter Resources available at PharmacistsLetter.com

Toolbox, Improving Heart Failure Care. Pharmacist's Letter/Prescriber's Letter. January 2021. Chart, Medications and Supplements With Adverse Effects in Heart Failure. Pharmacist's Letter/Prescriber's Letter. September 2016.

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