Transcript Details
This is a transcript of a continuing medical education (CME) activity. Additional media formats for the activity and full activity details (including sponsor and supporter, disclosures, and instructions for claiming credit) are available by visiting:
https://reachmd.com/programs/cme/managing-hk-in-hf-navigating-the-evolving-clinical-landscape/13029/

Released: 11/17/2021
Valid until: 11/17/2022
Time needed to complete: 15 minutes

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Managing HK in HF: Navigating the Evolving Clinical Landscape

Announcer:
Welcome to CME on ReachMD. This episode is part of the Global Heart Failure Academy and is brought to you by Medtelligence.

Prior to beginning the activity, please be sure to review the faculty and commercial support disclosure statements as well as the learning objectives.

Dr. Ferdinand:
Renin-angiotensin-aldosterone system inhibition [RAASi] is an established and crucial part of the management of patients with heart failure. Despite this, there is a substantial gap between the guideline recommendations for the treatment and the real-world prescribing patterns for RAASi therapy. This is a serious problem because patients receiving suboptimal dosing have worse cardiorenal outcomes and higher mortality than patients on maximum tolerated doses. In particular, RAASi therapy is underutilized in patients with CKD [chronic kidney disease], with the development of hyperkalemia constituting the major barrier to optimal therapy. So how can we better approach long-term care of our patients with heart failure, optimize RAASi therapy, and also manage comorbid conditions?

This is CME on ReachMD, and I'm Dr. Keith C. Ferdinand.

Dr. Metra:
I am Dr. Marco Metra. I'm Professor of Cardiology at the University of Brescia, Italy.

Dr. Ferdinand:
So, Dr. Metra, let's approach this topic by first discussing the gaps in RAASi therapy in the management of heart failure. My first question is, why are we falling so short of using optimal RAASi therapy, and what can be done?

Dr. Metra:
Thank you for your question. This touches a critical point in the treatment of the patients with heart failure with reduced ejection fraction. We know the treatment. We know that there are 4 classes of drugs that may substantially reduce mortality and heart failure hospitalization. But despite this evidence, even the drugs for which we have evidence for many years, treatment is suboptimal. And recent registries like CHAMP-HF or Get With The Guideline HF have consistently shown that there is still a large proportion of patients who do not receive renin-angiotensin-aldosterone inhibitors, with more than 25%-30% of the patients not on an ACE [angiotensin-converting enzyme] inhibitor or an ARNI [angiotensin receptor neprilysin inhibitor], and more than 50% of the patients, if not 60% of the patients, who are not receiving an anti-aldosterone agent, even in the absence of contraindications. Then of course, even a larger proportion of patients are receiving suboptimal, sub-targeted doses of renin-angiotensin system inhibitors, and we have had published in *European Journal of Heart Failure* recently an analysis from UK, US, and Sweden regarding patients who started, neurohormonal modulators for heart failure and then follow up for 1 year. And this analysis consistently showed that up to more than one-quarter of the patients discontinue even ARNI, or more than 30%-40% of the patients discontinue anti-aldosterone agents, mineralocorticoid antagonists. And therefore, we now know that the neurohormonal modulators are not initiated in a large proportion of patients who do not have contraindications, are given at suboptimal doses, and are discontinued after their initiation in, again, a substantial proportion of patients. This undertreatment relative to guidelines is associated with a substantial increase in mortality and in hospitalization rates.

Dr. Ferdinand:
Well, I certainly think those are important data, and what is suggested is that if we are not using the optimal therapy for our patients with heart failure, it's not just that we're removing the effects of that therapy, we are actually potentially allowing our patients to have an increase in hospitalization and overall mortality.

There are some recent guidelines that have been released in 2021 from ESC and HFA. Any comments related to both guidelines that are pertinent to today's session, Dr. Metra?

Dr. Metra:
Thank you again for this question. I have had the honor and the burden to co-chair the guidelines by the European Society of Cardiology together with my friend and colleague, Theresa McDonagh from London, and there are some key messages from these guidelines. We now have 4 classes of drugs which are mandated – which must be given to all the patients with heart failure and reduced ejection fraction to reduce mortality and reduce heart failure hospitalizations. And therefore, in addition to ARNI or ACE inhibitors, mineralocorticoid antagonists, and beta-blockers, we now have SGLT2 inhibitors, empagliflozin or dapagliflozin, which are indicated because they were shown to improve outcome in randomized, placebo-controlled trials in patients with heart failure with reduced ejection fraction. DAPA-HF showed a reduction in mortality and in heart failure hospitalizations with the dapagliflozin versus placebo, and EMPEROR-Reduced showed a reduction in the primary outcome, composite outcome, and in heart failure hospitalizations with empagliflozin versus placebo. These drugs must therefore be added to the 3 other classes of drugs.

But the other major difference from the previous guidelines is that, rather than a step-on approach with 1 drug added on top of the other after the reassessment of the patient and after the titration, if possible, of the previous drug, we just wanted to point out that the 4 classes of drugs must be given all together to all the patients with heart failure with reduced ejection fraction. We didn't want to give specific indications regarding the sequencing because there are no major evidence. And on the other hand, we have to come to having all the 4 drugs, if tolerated, on board in the patient – taken by the patient, in the shortest time as possible.

Dr. Ferdinand:
That's a very important point that you've made, Dr. Metra, and that is that it's not enough just to use 1 or 2, but all 4 classes of agents appear now to improve outcomes for heart failure with reduced ejection fraction. So it appears, along with RAASi therapy and the use of beta-blockade, we now have recommendations for SGLT2 inhibitors. The guidelines appear to point to dapagliflozin and empagliflozin of that class, as you've mentioned, because of their effect on heart failure hospitalization and outcomes.

For those of you who have just tuned in, you're listening to CME on ReachMD. I'm Dr. Keith C. Ferdinand. Here with me today is Dr. Marco Metra. We're discussing the key updates from the European Society of Cardiology/Heart Failure Association guidelines, and the implications for management of our patients with heart failure and reduced ejection fraction, especially with multiple comorbid conditions.

For the last few minutes, can you address the underutilization of RAASi therapy because of fears of hyperkalemia, where clinicians won't use maximum RAASi therapy because they're afraid that they will increase complications for their patients because of elevated potassium?

Dr. Metra:
Yes. You are correct. Thank you for your question. Actually, hyperkalemia is a major cause of undertreatment of our patients. First of all, let's recall that many surveys and observational studies have shown a U-shaped relationship between serum potassium and mortality. And the optimal values of serum potassium are between 4 and 5, and starting with values above 5 milliequivalent per liter, we have an increasing mortality, and therefore, we must aim at optimal serum potassium levels between 4 and 5. And the current guidelines have provided 1 table in the supplementary material – table number 24. Because of shortness, we had to keep it in the supplementary material. But this table clearly shows what to do depending on serum potassium levels and the need to implement the treatment in our patients despite a tendency toward hyperkalemia. And, therefore, we now have potassium-lowering agents with an excellent tolerance also in patients with heart failure and in patients with heart failure and concomitant kidney dysfunction. We have patiromer and sodium zirconium cyclosilicate [SZC] that both bind to potassium in the gut and avoid its absorption. Patiromer, namely, is an inert substance with no consequences on electrolyte absorptions, and it's effective in reducing serum potassium levels. And what we now know is that it's additional to standard therapy, may increase the likelihood that the patient may initiate and titrate to targeted doses of renin-angiotensin system inhibitors and aldosterone antagonists. Therefore, these serum potassium-lowering agents must be regarded as facilitators, the same as when we give gastric protection to make aspirin more tolerated in our patients; it's the same. These drugs keep serum potassium levels at optimal values and may therefore allow the titration of renin-angiotensin system inhibitors and mineralocorticoid antagonists. And hyperkalemia is shown as the major cause of lack of initiation of these drugs.

Dr. Ferdinand:

Thank you, Dr. Metra. That's certainly a very important point, that now we can maximize RAASi therapy by using potassium binders if needed, especially in patients who have heart failure and chronic kidney disease, where the incidence of hyperkalemia may be greater than 50% or more within a year.

This has been a wonderful conversation, but before we wrap up, Dr. Metra, can you share with our audience one take-home message – one thing that you think it's most important for them to remember?

Dr. Metra:
Yes. Thank you. So let's recall this: first, hyperkalemia, even when serum potassium is about 5, is associated with increased mortality, and it's awful for the patient. Hyperkalemia is also a major cause of lack of initiation or titration of mineralocorticoid antagonists and renin-angiotensin system inhibitors and modulators. Third, we now finally have potassium-lowering agents, such as patiromer or SZC, that are well tolerated, may prevent hyperkalemia because they bind potassium in the gut and hinder its absorption. And these drugs – potassium-lowering agents – may therefore be a major tool for the implementation of evidence-based medical treatment known to reduce mortality and hospitalizations in our patients with heart failure.

Dr. Ferdinand:
Thank you for that take-home message. And I would like to add one message, and that is we should try to apply evidence-based medicine to all of our patients, regardless of their sex, gender, or geography.

Unfortunately, that's all the time we have today, so I want to thank our audience for listening in and certainly thank you, Dr. Metra, for your very important information and joining me today. It was great speaking with you.

Dr. Metra:
Thank you.

Announcer:
You have been listening to CME on ReachMD. This activity is provided by Medtelligence.

To receive your free CME credit, or to download this activity, go to ReachMD.com/HeartFailure. Thank you for listening.