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Overcoming Clinical Inertia in Hyperkalemia Management

Announcer:

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Dr. Rossing:

Hyperkalemia is a common electrolyte imbalance. It can pose a significant challenge in patients with chronic kidney disease, or CKD, and coexisting conditions like heart failure. This can complicate treatment decisions and patient outcomes, and today we'll discuss treatment strategies, overcoming clinical inertia, and the importance of collaboration.

Now, this is CME on ReachMD, and I'm Dr. Peter Rossing.

Dr. De Nicola:

Hi, I am Luca De Nicola, and I'm a nephrologist at the Vanvitelli University in Naples, Italy. And I'm becoming president of the Italian Society of Nephrology.

Dr. Böhm:

My name is Michael Böhm. I'm the chairman of cardiology and intensive care medicine of the University of Saarland in Homburg/Saar, Germany. I have a special interest in heart failure, hypertension, and of course, drug therapy.

Dr. Rossing:

Well, to start us off I'm interested in both of your perspectives on managing hyperkalemia in patients with CKD and coexisting conditions. And specifically, one of the biggest challenges we as healthcare professionals encounter. So maybe I can start with you, Dr. Luca. What did you think about the challenges in managing hyperkalemia?

Dr. De Nicola:

Well, this is a typical condition, Peter, where collaboration is the basic approach. And the role of a nephrologist becomes relevant because we know that external potassium balance is mostly maintained by the kidneys for 90%. While the quota undergoing intestinal excretion of potassium in the stool is very low, although it can increase to 30% in advanced CKD. However, we know that the lower the eGFR [estimated glomerular filtration rate], the higher is the risk of hyperkalemia. What is important to understand is that, beside and beyond the renal excretion, eGFR, we need to consider treatment. RAAS [renin-angiotensin-aldosterone system] inhibitors play a major contributing role to hyperkalemia. And the paradox is that they increase the risk of hyperkalemia, but they are very protective on kidney and heart damage. So we need to keep RAAS inhibitors on board when we treat patients with the cardiovascular disease and kidney disease.

For kidneys, we recently published this meta-analysis of control arms from 92 controlled trial in CKD patients. They have been carried out in the last 3 decades. What we know is that there was an improvement in the progression of kidney disease. The eGFR decline became smaller over the years from, 5 mL lost in the first decade. We drop to 3.2 mL/min/year. So there was an improvement in the

progression, about the 70% decrease in the progression of kidney disease. But when we look at the characteristics of patients, what we noted, the first look is that there was an increase in the use of RAAS inhibitors. So RAAS, can we say, that have contributed in a very important manner to reduce the eGFR loss over the last 30 years. And in this RCT, there was an increase in the use from 16% to 85% of patients. So this therapy with RAAS inhibitors was the key to reduce progression of kidney disease.

Dr. Rossing:

Well, thanks a lot, then. And over to you, Michael, what is the cardiologist's perspective on this?

Dr. Böhm:

There are, I think, 2 issues. The first is the creation and the potential creation of hyperkalemia, and the second one is the fear of hyperkalemia. So the second one leads to undertreatment of these patients. So hyperkalemia, of course, is something which can occur not only in the inpatient setting, it can occur outside the hospital, and we have a high load of comorbidities and heart failure. Only 50% of the patients with heart failure have normal kidney function and, of course, they are prone to develop hyperkalemia. And they're also requiring drugs such as RAAS inhibitors, which can be an AT1 blocker, ACE [angiotensin-converting enzyme] inhibitor. In the newer days, it can be a neprilysin AT1 blocker inhibitor – AT1 blocker, the ARNI [angiotensin receptor-neprilysin inhibitor] combination. And then, of course, there's mineralocorticoid antagonist, MRAs. And combining these drugs, of course, can, in the presence of impaired kidney function, cause hyperkalemia. I think that is the greatest challenge.

Dr. Rossing:

Well, thanks a lot. And important aspects, and as I hear both in CKD and in heart failure, hyperkalemia is a frequent topic and therefore I'd like you to address also, Michael, what about the clinical inertia in optimizing treatment? How do we sequence the management of hyperkalemia? Because you mentioned the fear of hyperkalemia is a problem. So how do we deal with this and how can we maintain or start the RAAS-blocking therapy or the MRAs to protect kidneys and heart?

Dr. Böhm:

So there are 2 issues. It's, first of all, the fear of hyperkalemia comes if patients have impaired kidney function, and only impaired kidney function, already is a reason for inertia. They are poorly treated, in particular, when it comes to an eGFR of below 50, not below 30, where the natural margin there and it indeed gets difficult to apply the drugs. And, of course, in these patients there is hyperkalemia. And the cardiologists get nervous when they see an eGFR of 45. But indeed, there is an indication of the majority of drugs, and there is no limitation to apply these drugs down to an eGFR of 30 or 35, including the MRAs.

There are 2 classes of drugs among the big 4s in heart failure, which can easily reduce the rate of hyperkalemia, and that is the SGLT2 inhibitor, and that is the ARNI, in particular, when it is MRA induced. We have solid data from the PARADIGM study that, indeed, the rate of new-onset hyperkalemia is reduced, but still, of course, one has to be aware of it, and therefore the fight is the recognition of comorbidities.

Dr. Rossing:

What else is your option if you don't want to stop these treatments?

Dr. Böhm:

So first of all, you are completely right, they should not be stopped because they reduce hospitalization and they reduce, also, cardiovascular death, so they should be maintained. The guideline clearly recommends only to intermittently stop the drugs. And of course, if there is really a problem, patients who have really repetitive hyperkalemias, then we have the options of potassium binders.

Dr. Rossing:

For those just tuning in, you're listening to CME on ReachMD. I'm Dr. Peter Rossing, and here with me today are Dr. Luca De Nicola and Dr. Michael Böhm. We are focusing on a collaborative approach to managing hyperkalemia and overcoming clinical inertia in patients with CKD.

And what would be the nephrologist's perspective on this management, Luca?

Dr. De Nicola:

Well, the problem is that, also, we need to keep RAASi therapy as long as possible, and we have to manage the hyperkalemia risk. What is important to recall to mind is that the vast majority of observational studies, even in advanced CKD with the eGFR around 30 or below, these studies have indicated to maintain RAAS inhibition.

Therefore, follow guidelines. I mean, guidelines recommend to start and maintain as long as possible RAASi therapy and to treat hyperkalemia. With all the tools we have included, of course as Michael was saying, the new, novel K binders that are indicated for chronic treatment. Actually, until stage 5 of chronic kidney disease, meaning that we have to get rid of clinical inertia or hesitancy in

these patients, control hyperkalemia, and keep on board anti-RAS therapy.

Dr. Rossing:

Thanks a lot. And now, let's consider a multidisciplinary approach where we are helping each other. How can healthcare professionals from different specialties work together more effectively to manage hyperkalemia in people with CKD, and how can we ensure an optimal outcome for our patients?

So, Luca, let me start with you. What would, from your perspective, be a consideration for collaboration or multidisciplinary approach?

Dr. De Nicola:

What we can suggest is a kind of pragmatic step-by-step approach where, based on potassium levels, we need to treat first the constipation, which is a very important cause of hyperkalemia; avoid excessive potassium intake; correction of acidosis is very important. Then when we see that we cannot make it with this approach, we need, of course, to use patiromer or sodium zirconium cyclosilicate. Increase the rate of treatment. We can consider SGLT2 inhibitors. And then go ahead with the step-by-step approach.

Dr. Rossing:

Thanks. And the cardiologist perspective on this, Michael?

Dr. Böhm:

Yeah. Of course, a collaboration is key. This is not only the kidney; it's general. We have the highest comorbidity load in this elderly population with chronic heart failure. Of course, the kidney is the most prevalent one, so therefore, for our complication, I think it's important to have nephrologists around when hyperkalemia gets difficult. Then, of course, he has the opportunity to do dialysis and other things. Second point is we have, indeed, a problem when we have this comorbidity and a certain degree of kidney failure.

Dr. Rossing:

Well, thanks a lot. This has really been an interesting discussion, and maybe before we wrap up can I ask you to provide maybe one take-home message for our audience? So maybe starting with you, Luca.

Dr. De Nicola:

Yeah, Peter, I figure there are 2 keywords here. The first is collaboration and the second is action. I mean, we have to abate the clinical nature, which is unfortunately, very common. We need to understand that we cannot miss the benefits of a RAAS inhibitor, RAAS inhibitors, and we can optimize potassium control by using several tools, including the new K binders that are indicated for chronic therapy at balance with the older one.

Dr. Rossing:

Thanks a lot. And Michael, final take-home message from you?

Dr. Böhm:

The first message is to cardiologists: Don't be afraid of the kidney. Yeah? Don't be too afraid of the kidney. And the second key message is don't be afraid because we have the collaboration possibilities with the nephrologists, and we have them in the background. Also for treatment of complication for advice with hyperkalemia, the use of potassium binders.

Dr. Rossing:

That's all the time we have for today, so I want to thank our audience for listening in and thank you, Dr. Luca De Nicola and Dr. Michael Böhm, for joining me and for sharing all your valuable insights and your expertise. It was great speaking with both of you today.

Dr. De Nicola:

Thank you. Bye-bye.

Dr. Böhm:

Thank you very much. Bye-bye.

Announcer:

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