

Expanding Treatment Options, Nutrition Guidelines for CKD

Q One of my diabetic patients read about finerenone in *The New York Times*. Apparently, it's the "newest cure for albuminuria"! Is this just hype, or do the trials on this medication really show progress against kidney disease? Should I buy stock in the company?

Albuminuria (> 500 mg/d) associated with diabetic nephropathy and other glomerular diseases increases patient risk for chronic kidney disease (CKD) and its progression to end-stage renal disease (ESRD). Reduction of albuminuria has been shown to slow the progression of CKD.

Renin-angiotensin-aldosterone system (RAAS) blockers, such as ACE inhibitors or angiotensin receptor blockers, are considered firstline therapy to reduce albuminuria. Additional treatment modalities include diuretics, nondihydropyridine calcium channel blockers, β -blockers, and aldosterone antagonist therapy. Limiting dietary sodium helps control blood pressure, thus slowing disease progression. In addition, some studies show that limiting phosphorus and protein (for the latter, intake of no more than 0.7 g/kg ideal body weight per day) may slow the progression of CKD. Unfortunately, despite

these interventions, patients may still advance to ESRD.¹

The aldosterone and steroidal mineralocorticoid receptor antagonists (MRA) spironolactone and eplerenone have been found to reduce albuminuria when used in conjunction with RAAS blockade. However, patients using this combination are up to eight times more likely to experience hyperkalemia—a serious, potentially life-threatening adverse condition—than those not using an MRA.² The presence of hyperkalemia requires discontinuation of the RAAS blocker and the MRA, at least temporarily.

Finerenone, a nonsteroidal MRA with "greater receptor selectivity than spironolactone and better receptor affinity than eplerenone in vitro," is in phase III trials for the treatment of systolic and diastolic dysfunction and reduction of morbidity and mortality associated with heart failure.² One study has already demonstrated that finerenone (5 to 10 mg/d) is at least as effective as spironolactone (25 mg/d) for heart failure patients.³

The Mineralocorticoid Receptor Antagonist Tolerability Study-Diabetic Nephropathy (ARTS-DN) found that finerenone at 10 to 20 mg/d was superior to spironolactone and eplerenone,



The National Kidney Foundation Council of Advanced Practitioners' (NKF-CAP) mission is to

serve as an advisory resource for the NKF, nurse practitioners, physician assistants, clinical nurse specialists, and the community in advancing the care, treatment, and education of patients with kidney disease and their families. CAP is an advocate for professional development, research, and health policies that impact the delivery of patient care and professional practice. For more information on NKF-CAP, visit www.kidney.org/CAP

partly due to the decreased incidence of hyperkalemia. However, it should be noted that the lower incidence of hyperkalemia may be attributable to the fact that 66% of the study participants had an estimated glomerular filtration rate (eGFR) greater than 60 mL/min and that potential participants with a serum potassium level of more than 4.8 mEq/L were not included in the study.²

Additional research is needed to confirm superiority of finerenone over spironolactone and eplerenone, in conjunction with RAAS blockers, in the treatment of albuminuria and hyperkalemia. Including subjects with lower eGFR (such as patients with stage IV CKD who are at higher risk for hyperkalemia) would give a better indication of finerenone's efficacy. In the meantime, it's

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probably too soon to corner the market on this stock! —SEB

Q I see patients with diabetes, hypertension, chronic kidney disease (CKD), obesity ... often all within the same patient! I keep hearing that the DASH diet is best for these patients. Is this true? Do you have any suggestions (or handouts) for teaching good eating habits in a 15-minute office visit?

It is always nice to focus on what patients *can* do, rather than what they *can't*. Patients with diabetes, kidney disease, heart disease, and obesity hear a lot of “can't” messages, making “can” messages particularly important to emphasize.

Healthy diets for diabetes, heart, and kidney patients include foods low in trans and saturated fats and sodium. Not all CKD patients are required to follow a low-potassium diet; dietary restrictions are based on laboratory values, medications, and other factors. As we know, adding an ACE inhibitor or an angiotensin receptor blocker (ARB) to the treatment regimen can cause an elevation in serum potassium.

For adults with CKD, it is recommended that sodium intake be restricted to < 2,000 mg/d.⁴ And in this population, salt substitutes are not recommended, since they often contain large amounts of potassium chloride, which increases risk for hyperkalemia.⁵ Other spices (eg, garlic, pepper, lemon) are better substitutes for salt.

The late Paul Prudhomme, an award-winning chef from New Orleans, struggled with obesity and health issues for years. He developed wonderful, kidney-friendly spices free of salt and po-

tassium. His line of spices, Magic Seasoning Blends, is sold in many grocery stores. You can recommend them without worry.

Studies have shown that the usual Western diet (which features an abundance of processed foods, fats, and sugars) contributes to kidney disease.⁶ The DASH (Dietary Approaches to Stop Hypertension) diet, developed by cardio experts, replaces these foods with healthier alternatives.

Recent research has shown that the DASH diet does, in fact, slow the progression of kidney disease.⁷ It also lowers blood pressure and decreases kidney stone formation, which are risk factors for kidney disease.

So, the DASH diet is protective for your patients (from both a kidney and a cardiac standpoint)—but how do you explain this in a 15-minute office visit?

Here are a few quick tips:

- **Increase fruit and vegetable intake** to include all colors on your plate (and no, tan is not really a color)
- **If you eat meat, the cooking method should start with “B”** (ie, bake, boil, broil, barbecue [without salty sauce]) ... Note that “fried” does not start with “B”!
- **Use a smaller plate** and you will not eat as much
- **Use technology in your favor.** There are great apps and downloads you can recommend (see Table). —CC CR

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TABLE

Kidney Disease and Diet: Patient-friendly Resources

CDC: Sodium and the Dietary Guidelines

(<http://1.usa.gov/1TEukif>)

Easy-to-read, patient-friendly handout

DaVita (<http://bit.ly/1RutPQ8>)

Printable, free diet advice for patients with kidney and heart disease

National Kidney Foundation

(NKF) App (<http://bit.ly/25kHUCh>)

Includes recipes, meals, and food suggestions. Great for patients with kidney disease, diabetes, or hypertension

NKF Kidney Kitchen

(<http://bit.ly/27Ukts5>)

Offers recipes and suggests healthy adaptations for holiday meals, or anytime

National Kidney Disease Education Program website

(<http://1.usa.gov/1K4kAmn>)

Section dedicated to diabetes, diet, and kidney disease; has handouts galore; diet-specific PDFs are also available (<http://1.usa.gov/1sRYWBI>).

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