Hello, and thank you for joining us for the End Stage Renal Disease National Coordinating Center podcasts. My name is Jerome Bailey and I’m the associate director of patient and family engagement with the ESRD NCC. We partner with patients, healthcare providers, and the Centers for Medicare & Medicaid Services—also known as CMS—to create and share resources that help kidney patients improve their quality of life.

On today’s podcast we are discussing how to keep patients safe and healthy inside and outside of the dialysis unit. We explore infection prevention, the importance of understanding lab results, tips to help patients follow a kidney-friendly diet, and more!

To help us examine these topics, I’m joined by Sheila McMaster, a registered nurse, and Quality Improvement Director for ESRD Network 8 and Laci Smalley, a registered dietitian for Fresenius Kidney Care in West Louisiana.

Thank you both for joining us!

Jerome: Thanks for having us Jerome.

Sheila: So, let’s start the conversation with Sheila. What are some of the common infections seen in dialysis patients?

Jerome: Dialysis patients are similar to non-dialysis patients in that they have routine infections such as colds, bronchitis—those sort of respiratory infections. But, there is a somewhat higher risk of contracting bacterial infections, such as urinary tract infections.
Home Dialysis Discussions:

and pneumonia. Dialysis patients may also experience serious infections related to the dialysis access. For hemodialysis patients, an arteriovenous fistula has the lowest likelihood of infection, while a dialysis catheter carries the highest risk of infection. For most patients it's better to think of a dialysis catheter as a temporary access only, sort of like a spare tire. A catheter will work, not always really great, but it really isn't meant for long-term use. For most patients, once a permanent access, either a fistula or graft, can be used. The catheter can be removed, and infection likelihood can decrease. For peritoneal dialysis patients there's a risk of peritoneal dialysis catheter exit site infection, tunnel infection and/or peritonitis.

Sheila, who determines what type of access a patient receives?

Jerome  
Great question. Generally, that's a conversation that needs to be held between the patient and the care team. Nephrologists usually strongly suggest permanent accesses such as a fistula or a graft for patients who are able to maintain those accesses. There are some patients who can't have a working fistula or graft for physical reasons. But generally, the nephrologist [is] kind of captain's the ship. And then, in consultation with a surgeon, the best access is chosen.

How can those infections be prevented?

Another good question. Dialysis staff spend a huge amount of time teaching patients about strategies to avoid these infections. Simple, proven strategies such as hand-washing vaccinations for flu, pneumonia hepatitis, shingles, or even chickenpox. They also discuss excess type and teach patients about the lowest risk access. They teach patients about proper arm cleaning prior to needle insertion for patients who have a fistula or a graft. And they also teach patient signs and symptoms of infection that need to be reported when they occur, such as fever chills, redness, tenderness, or drainage at the exit site. Abdominal pain or cloudy dialysis fluid for peritoneal patients. For patients [who] are medically unable to have a fistula or graft and must rely on a catheter we really want these patients and their family members to be superstars in infection control. This generally means keeping that catheter dressing in place and dry of course. Right now, we want all patients following CDC (Centers for Disease Control and Prevention) guidance for hand-washing or hand sanitizer use, wearing mask, and physical distancing to minimize the spread of COVID-19.

What is a dietitian and what role does this person play in as part of a dialysis patient’s healthcare team?

Laci  
So, a dietitian is an expert in nutrition in the dialysis setting. The dietitian is someone who specializes in nutrition for the renal population. The role of the dietitian is to help, you know, improve the patient's overall quality of life by improving their nutritional status.
**Home Dialysis Discussions:**
Dietitians in the dialysis setting provide the patients with nutrition education and we provide the patients with the tools and resources that they need to help improve their nutrition.

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<th>Jerome</th>
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<td>Laci</td>
<td>So, when the dietitian reviews lab results with the patient, we explain how the patient's diet can affect those lab results. And then help the patient to make diet changes to improve those labs. We also help the patient to understand how those lab results can affect the patient's just overall health in general.</td>
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<th>Jerome</th>
<th>Are there lab results that patients should pay close attention to and why?</th>
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<td>Laci</td>
<td>Yes. So, the first one would be the albumin. And albumin is a measure of the protein in blood. Albumin is extremely important to help fight infection and it aids in healing. So, it's very important for the patients to eat plenty of protein. So, eggs, fresh chicken, fish, lean beef. Another lab that's important is potassium. And potassium is a mineral that's needed for normal heart and muscle function. But too much potassium could actually cause the heart to stop. So, there are also foods that are high in potassium that the patient must avoid. Things like orange juice, oranges, bananas, potatoes, tomatoes. Another lab is phosphorus. Having an elevated phosphorus over time could lead to bone or heart disease. There are also foods that are high in phosphorus that the patient must avoid. Things like dark sodas, excessive amounts of dairy, fast food, and junk foods—those type of foods. Another thing that's not necessarily a lab, but it's very important that the patients watch their salt intake because salt not only increases blood pressure, but it makes the patient thirsty which could lead to fluid overload.</td>
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<td>Laci</td>
<td>Following the diet can really just improve the patient’s overall quality of life. It can help [him] to feel better. Having good labs can help the patient feel better. Following the diet could also help to prevent further health complications and reduce the risk of hospitalization.</td>
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<td>Laci</td>
<td>If they miss or skip, they could begin to retain fluid which would cause them to have trouble breathing. The extra fluid is hard on the heart. It causes the heart to work overtime. The build-up of toxins in the blood could cause the patient to lose their appetite. They could become you know they could develop nausea and vomiting. I mentioned potassium earlier. Potassium could become elevated which could cause the patient to feel very bad. And, like I said in extreme instances, could even cause the heart to stop.</td>
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Home Dialysis Discussions:

Sheila  
That's a great point Lacey and I would just add that missing dialysis may mean missing important medicines that are normally given during dialysis. And everyone knows that life happens and there are times when a patient simply can't make a scheduled appointment. The key when that happens is to talk with the clinic about this and reschedule the treatment, not just skip it. We don't want patients to have those consequences of shortness of breath or high potassium levels or high blood pressures or missed medicine.

Jerome  
What advice would you give to a dialysis patient struggling to follow his healthcare team’s advice?

Sheila  
This is Sheila and I would say one word: communicate. Patients need to be an active part of the health care team. They are the quarterback. They need to work with everyone on the team. They need to ask questions. Generally, if we understand the why the behind the advice that is given, it helps us to avoid learning lessons the hard way. So, I would say communicate.

Laci  
Yeah, I agree with Sheila. Having those open conversations with their dialysis staff. We are here to help. The dietitian, the social worker, the nurse, we are all here for that patient. I would also suggest that they find support in a family member or a friend. Someone that you know, that helps to encourage the patient—that helps keep them on track. Maybe someone to help with grocery shopping or just you know checking in with the patient daily just for that encouragement.

Jerome  
Thank you, Jerome. We thank you for listening to this podcast. To listen to the rest of our podcast series on kidney transplant or home dialysis or to learn more about kidney failure, visit the End Stage Renal Disease National Coordinating Center website at www.esrdncc.org, or talk to your healthcare provider.

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