agement when eGFR is less than 30 mL/min/1.73 m^2," St. Peter said. "This study sets the stage for chlorthalidone to become a main component of blood pressure management in patients with stage 4 CKD."

St. Peter cautioned, however, that clinicians need to do more frequent monitoring in patients already receiving a loop diuretic because the combination increased the risk of hypokalemia and increased serum creatinine due to a combination diuretic effect.

Other studies presented during the High-Impact Clinical Trials session included the following:

- The EMPEROR-Preserved (Empagliflozin Outcome Trial in Patients with Chronic Heart Failure with Preserved Ejection Fraction) trial, presented by Faiez Zannad, showed that empagliflozin reduced cardiovascular death and heart failure hospitalization and slowed kidney decline in patients with heart failure with preserved ejection fraction with and without CKD (6).
  The ADVOCATE (A Phase 3 Clinical Trial of CCX168 [Avacopan] in Patients with ANCA [Anti-Neutrophil Cytoplasmic Autoantibody]-Associated Vasculitis) trial showed that patients with ANCA-associated vasculitis taking avacopan had better recovery of kidney function than patients taking prednisone, as explained by David Jayne (7). The US Food and Drug Administration approved use of avacopan for ANCA-associated vasculitis (8).
- Five-year follow-up results from the Ellipsys Vascular Access System pivotal trial of an ultrasound-guided, percutaneous outpatient technique for creating an arteriovenous fistula show that patients' use of the fistula remained above 90% at 5 years, and only one-half to one-quarter of patients needed a second procedure, said Jeffrey Hull, MD, director of the Richmond Vascular Center in Virginia, during a press briefing about the results.
- Another study presented by Aditi Sinha, MD, MBBS, PhD, professor of pediatrics at the All India Institute of Medical Sciences in New Delhi, showed no benefit to extending prednisone treatment for longer than 12 weeks for very young children with nephrotic syndrome. The open-label, multi-center study that randomized 172 children younger than 4 years with nephrotic syndrome to 12 or 24 weeks of prednisone found the proportions of patients who achieved sustained remission, relapse rates, or time-to-first relapse were not significantly different between the groups. Adverse effects were similar in the two groups, she said.

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Nephrology Teams Can Help Address Patients' Psychosocial Needs

By Karen Blum

Patients with chronic kidney disease have a high symptom burden that can impact their outlook on life and self-confidence to manage disease. With the recognition of these features, nephrology teams can offer targeted solutions to help patients improve their quality of life, according to a presentation at Kidney Week 2021.

More than 60% of patients receiving dialysis reported feeling depressed, worried, or frustrated in a recent survey (1), said Daniel Cukor, PhD, director of behavioral health at the Rogosin Institute in New York. "There's a really high emotional toll being a patient with end stage renal disease [ESRD]," he said.

About 6% of patients in the general population experience depression, according to another study looking at the prevalence of depression in patients with different medical conditions (2). However, depression among people with ESRD is estimated to range from 22% to 37%, akin to prevalence in patients with ovarian or brain cancers or those who experienced heart attack, hypertension, or type 2 diabetes.

There are four models of thinking that explain why the emotional toll is so high for patients with kidney disease, Cukor said.

1) Coping model. This involves a patient's interpretation of whether he or she has the power, ability, or resources to respond to, adjust to, or fight a particular event or challenge. This evaluation determines a person's ability to cope. The greater the threat or challenges, the larger the coping response an individual must mount in response.

The demands for ESRD are multifaceted. Kidney failure taxes the body and spirit. Treatments, although life saving, also pose a high burden on patients. Additionally, some patients may have lifestyle changes imposed on them, such as needing to stop work or travel. This may impact future plans, such as how they were going to spend their retirement years.

To help, Cukor said, clinical teams can provide support to decrease the amount of demand on patients while increasing the available psychological resources. They can conduct patient-centered team meetings to really hear about what's bothering patients and their families; connect them to any needed resources and to patient ambassador programs; and offer support groups or family counseling sessions.

2) Cognitive behavioral model. In this model, patients believe that bad things, such as needing dialysis, are internal (meaning because of them), widespread, and unlikely to change in the future. These are hallmarks of depressive thinking.

If patients think managing their condition is too hard, it can launch a negative, vicious cycle where they begin to isolate from friends and family, to skip clinical visits, or to not maintain open communication with the care team. Turning that around to a more positive outlook, patients will engage more and feel more mastery over their condition.

Clinical teams can support patients here by offering cognitive behavioral therapy, which includes a process called cognitive restructuring—a careful evaluation of people's thoughts and whether they contribute to a positive or negative cycle and helping people reframe and think more positively about their situation. Psychologists or counselors with the program also could help people accept that their life may be different now and offer existential coaching, helping patients work to derive meaning and enjoyment from activities they still are able to do.

3) Learned helplessness. If a patient's life revolves around dialysis—waking up in the morning and prepping for treatment, going to dialysis, and then recovering from treatment multiple times a week—it can be very challenging and demanding. As a result, other rewarding life activities, including socializing, tend to fade out because all of the person's energy is consumed by the dialysis cycle and thinking it's never going to get better. Patients tend to give up on everything else and have a negative outlook.

In this case, clinical teams can offer better patient engagement, finding strategies to partner with patients to keep their motivation high and keep them active in care. Motivational interviewing can help people understand for themselves what their drivers are. They also could consider pharmacological or non-pharmacological treatments for depression. Teams can help patients start rescheduling some of the activities they've given up that they enjoyed, such as calling or visiting a friend or going out to dinner. "If [people] look at [their] week, and it's not only medical related, [they] tend to feel a lot better and a lot more engaged in their care," Cukor said.

4) Symptom burden. A high symptom burden has been reported in patients from a 2005 survey of 162 dialysis patients from three centers (3). In that study, over 50% of patients reported mood or sexual issues, sleep difficulties, pain, and skin and gastrointestinal issues.

Poor sleep, in particular, can lead to a cycle of fatigue, napping, decreased satisfaction with sleep, and anticipatory anxiety related to sleep, Cukor said. Symptom burden also can lead to a cycle of depression where patients aren't sleeping well, aren't active, feel tired, and don't have energy for preferred activities. Pain, too, can start a cycle of not sleeping well or feeling anxious or depressed.

Symptoms should be thought of as interconnected gears, with one factor having the power to impact others. Clinical teams should focus on the interference caused by symptoms, to help patients return to more positive health cycles. Helping someone with pain, for example, may allow that person to get better sleep, which can in turn lead to improved mood.

"Targeting symptoms as clinical entities that are worth treating is really important," Cukor said. "They're not just merely comorbidities but are real difficulties that people are going through. Even if you can't solve all of them, if you can alleviate some of them, that would be quite a significant contribution to the patient's quality of life."

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