Managing co-existing relationship between obesity, chronic kidney disease

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A step toward improved collaboration between the nephrology and obesity medicine communities in managing persons with concurrent obesity and chronic kidney disease (CKD) has been initiated thanks to a workshop sponsored by the National Kidney Foundation (NKF) and The Obesity Society (TOS). The results of that workshop are described in a special report published in *Obesity*.

This multi-specialty, international, scientific workshop was held in 2021 by NKF and TOS to advance the understanding and management of obesity in adults with CKD. Attendees included top experts in the areas of kidney disease, obesity medicine, endocrinology, diabetes, bariatric/metabolic surgery, endoscopy, transplant surgery, nutrition, as well as patients with obesity and CKD.

"Obesity is arguably the most important risk factor in the 21st century for the development and progression of CKD. It is also a major cause in people with pre-existing CKD of worse health outcomes and lower quality of life. The rationale for the workshop was for nephrologists to learn more about obesity from physicians who specialize in treating obesity, and for obesity experts to better understand how kidney disease could affect people with obesity. The workshop offered the opportunity for clinicians and scientists from a variety of fields to work together and begin to identify challenges and opportunities in improving care for patients with obesity and CKD," said Allon N. Friedman, MD, Division of Nephrology, School of Medicine, Indiana University in Indianapolis. Friedman is the corresponding author of the report.

Experts note that it is becoming increasingly clear that obesity, which affects more than 650 million people globally, is not only highly prevalent in persons with CKD but is also a prime inducer of CKD and other kidney-related and unrelated adverse outcomes. Despite the unabated growth in obesity among adults and children, the utility of managing co-existing obesity as a strategy to improve health outcomes in persons with CKD is just beginning to be recognized and pursued in earnest.

According to the report’s authors, strategies for engaging nephrologists and obesity medicine experts are more likely to be successful if they bridge common ground. An initial step to facilitating engagement would be to recognize that, similar to treating CKD, obesity management includes recognition of obesity as a chronic disease with a specific pathophysiology that can be targeted utilizing available pharmacologic and bariatric surgery treatments. The benefits of weight management extend beyond just total pounds lost to include improvements in metabolic, blood pressure and cardiac health that help mitigate progression of kidney damage.

Nephrologists and obesity medicine experts must also appreciate that different strategies may be required depending on the stage of CKD and the severity of obesity. For example, in patients with...
CKD stages 3–4, the goal of obesity management could be to slow down or perhaps even reverse existing disease, whereas a more appropriate focus in persons with CKD stage 5 might be to facilitate successful kidney transplantation.

Another suggestion for collaboration is in the expanded use of dietitians, clinical pharmacists, nurse educators and advanced practice providers as clinical extenders. These affiliated providers could be trained to help promote effective obesity care by educating patients and referring them when indicated to obesity medicine specialists, multi-disciplinary obesity treatment centers or other qualified practitioners. This suggestion stems from the challenge that work required by nephrologists to manage obesity is often viewed as too time consuming or ineffective, according to the report's authors. Nephrologists may also have limited knowledge on the effects of obesity on the kidney and how to best manage it.

The two organizations also developed strategies to improve patient engagement. Patients with CKD and obesity are generally ill-informed about the potential contribution of obesity to their kidney disease and the kidney-related benefits of effective obesity management. Improving self-recognition of CKD, particularly in earlier CKD stages, is a necessary initial step to correcting this problem, the study's authors noted. Obesity as a risk factor for CKD progression is rarely raised by nephrologists to their patients.

Likewise, obesity specialists, who are more likely than nephrologists to see patients in earlier stages of CKD when weight management could have disproportionate long-term benefits on kidney health, may not be aware of the degree to which obesity is linked to CKD and related medical problems. "Changing these patterns will require concerted and long-term efforts to educate patients and clinicians alike," said Jonathan Q. Purnell, MD, Oregon Health & Science University, Portland, Ore., a co-author of the report.

Patients who participated in the workshop that generated the report felt that information on the biological control of appetite (i.e., hunger, satiety) and body weight would be an important aid in helping them understand that obesity in most instances cannot be optimally controlled merely by adjusting the type and amount of food consumed (lifestyle alone). Expanding support groups for patients undergoing medical or surgical treatment of obesity to include persons with CKD could be a helpful tool, according to patient participants.

A final suggestion to increase patient engagement is to have practitioners recognize the social stigma of obesity and make special efforts to use non-stigmatizing and non-prejudicial language and actions when addressing obesity with their patients. The report's authors noted that care also needs to consider widely different cultural, gender and societal norms about body size, weight, and obesity and these issues all need to be factored into how best to communicate with and treat individual patients.

Research discussions focused on defining the best clinical end points for future clinical trials. End points endorsed by workshop participants included the impact of obesity treatment on body weight and metabolic parameters such as blood pressure, sleep apnea, and markers of glycemic control; development of CKD in at-risk individuals; progression to kidney failure; major cardiovascular events, hospitalization, and mortality; and changes in quality-of-life measures.

Several additional clinical outcomes specifically relevant to post-transplant patients included studying weight gain after kidney transplantation and the effects of obesity and anti-obesity therapies on graft function and survival. The report's authors felt that clinical trial end points should address questions that are relevant to a wide range of stakeholders, including patients, clinicians, payors and healthcare systems. They added that flexible study designs, including adaptive and platform trials, allow incorporation and evaluation of emerging treatment options to keep the results as clinically relevant as possible.

The report's authors conclude that wide dissemination of study results will be critical to capturing the greatest benefit from this research investment for patients, providers and payors alike.

Provided by The Obesity Society


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