Kidney Transplants and Disease Education

Q All I hear about is the shortage of kidneys for transplantation. A friend of mine is on the local transplant list, and it is eight years long! Are there any ideas out there to grow your own kidneys?

Eight years is a long time for people dealing with the physical and emotional effects of kidney disease coupled with hemodialysis or peritoneal dialysis. Your friend is one of 110,000 patients (as of January 2015) in the United States on the United Network for Organ Sharing (UNOS) kidney transplant waiting list.[1] The UNOS/Organ Procurement and Transplant Network (OPTN) implemented new polices in 2014 to shorten the wait.

Among them: For pediatric patients (those younger than 18), the wait list time starts when the glomerular filtration rate (GFR) is ≤ 20 mL/min or the child starts dialysis. UNOS also has attempted to match posttransplant survival time of the graft with posttransplant survival time of the recipient through use of calculations that classify kidneys on the basis of how long they are likely to function once transplanted. Priority is now given to candidates with high immune system sensitivity or uncommon blood types, as they are less likely to obtain a kidney otherwise.[2]

The million-dollar question is how to obtain a kidney transplant in a timely fashion. Grave robbing, in case you are wondering, is not a viable option! Nor is *transplant tourism* (traveling outside the US to obtain an organ transplant), which confers a higher risk for severe infectious complications and acute rejection, possibly related to less extensive donor screening.[3]

There are other possibilities: Living donors can donate one kidney. Or, as is becoming increasingly common, paired organ transplants can be arranged. These occur when a patient in need of a kidney has a willing but incompatible donor; if a different match can be found, a "swap" is orchestrated, in which Donor A's kidney is transplanted into Recipient B and Donor B's kidney is given to Recipient A. This can be and has been done with multiple donors and recipients—in some cases, dozens—allowing the gift of donation to go on and on. (See page 40 for an overview of how this concept started.)

Some exciting research is going on with regard to 3D printing of kidneys; they are miniature for now but showing survival of the printed cells. Another area of exploration is regenerative medicine; researchers in the field are investigating the bioengineering of organs by taking the "scaffolding" of an organ and implanting a patient's own cells to "grow" a new organ (which, if successful, would also eliminate the need for immunosuppressants). Other signs of progress include recent news that scientists are getting lab-grown kidneys to work in animals.

It will be several years before any of these options will be viable. In the meantime, it never hurts to ask loved ones if they are willing to donate a kidney. Best wishes to your friend. **—DC**

Q The billing consultant who came to our office said we can increase our reimbursements if we also provide education to our patients with chronic kidney disease (CKD). Is she right?

In 2010, under an omnibus bill, kidney disease education (KDE) classes were added as a Medicare benefit. These are for patients with stage 4 CKD (glomerular filtration rate, 15-30 mL/min) and are to be taught by a qualified instructor (MD, PA, NP, or CNS).

The classes can be taught on the same day as an evaluation/management visit (ie, a regular office visit) and are compensated by the hour. (Side note: Medicare defines an hour as 31 minutes—yes, 31 minutes; Medicare takes for granted that you will also need

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time to chart!) You can teach two classes in the same day. Thus, if you wanted to, you could have a patient arrive for an office visit, then teach two 31-minute classes, and bill all three for the same day. The entire visit could be 75 minutes (although this may be exhausting for this population).

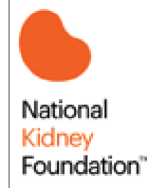
You can conduct the classes in a number of settings, including nursing homes, hospitals, skilled nursing facilities, the office, or even the patient's home. Many PAs and NPs have taught these classes to hospitalized patients who have lost kidney function due to an acute insult (ie, medications, dehydration, contrast).

Each Medicare recipient has a lifetime benefit of six KDE classes. The CPT billing code is G0420 for an individual class and G0421 for a group class. You must make sure you also code for the stage 4 CKD diagnosis (code: 585.4).

Congress stipulated KDE classes must include information on causes, symptoms, and treatments and comprise a posttest at a specific health literacy level. To make it simple, the National Kidney Foundation Council of Advanced Practitioners (NKF-CAP) has developed two free PowerPoint slide decks for clinicians to use in KDE classes (available at www.kidney.org/professionals/CAP/sub_resources#kde). References and updated peer-reviewed guidelines are included. You can print the slides for your patients and/or share the program with your colleagues.

Many nephrology practitioners teach the two slide sets over and over, because patients only retain one-third of the info we provide them on a given day. So if you teach each slide set three times, you have six lifetime classes—and hopefully the patient will have retained everything.

One caveat: Before you initiate KDE classes for a specific patient, check with the patient's nephrology group (we hope at stage 4 the patient has a nephrologist) to see if they are providing the education. **—KZ and JD** **CR**



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**

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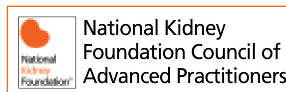

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