Office Visit: Kidney Transplantation of a Dreamer

Anthony J. Bleyer

Section on Nephrology, Wake Forest School of Medicine, Winston-Salem, NC, USA

Keywords

Deferred action for childhood arrivals · End-stage kidney disease · Immigrant · Kidney transplantation · Quality of life

Abstract

This editorial describes a patient who was cared for by the author. The patient developed end-stage kidney disease in the United States at the age of 17 but was denied kidney transplantation due to lack of insurance because of her immigration status. With the enactment of the Deferred Action for Childhood Arrivals (DACA) program, the patient was able to obtain a job and health insurance. The patient then received a kidney transplant when she was 27 years, after undergoing peritoneal dialysis for 10 years. The editorial describes how the DACA program improves the care of undocumented immigrants to the United States who are affected by kidney disease. While many might consider kidney transplantation to be available to all individuals in the United States, this is not the case. Individuals who are not US citizens are for practical purposes unable to undergo transplantation in almost all states because of their inability to obtain health

insurance. This editorial describes the history of one of my patients, and the profound impact that the DACA program (Dreamer Act) had on her care. This legislation is currently under review for continued approval in the United States legislature. I am happy to see my patient in clinic today for medical care following successful kidney transplantation.

© 2018 S. Karger AG, Basel

Background

I am happy to see my patient in clinic today for medical care following successful kidney transplantation. The patient came to the United States at the age of 2 years with her parents. She enjoyed a healthy childhood until she was diagnosed with systemic lupus erythematosus at age 16. The patient received immunosuppressive medical therapy, but her disease remained active and she quickly developed diffuse proliferative lupus nephritis. Despite receiving cyclophosphamide therapy followed by rituximab, kidney disease progressed and the patient developed end-stage kidney disease at age 17. Peritoneal dialysis (PD) was initiated

as renal replacement therapy, and from this age the patient performed this dialysis procedure independently, personally determining the dextrose composition of her dialysate to optimize volume status and blood pressure. She then connected in sterile fashion to an automated PD cycling machine, on which she remained for 9 h. Each morning she disconnected in a sterile fashion. The patient continued this daily routine independently and successfully through high school and graduated on time with good grades. Kidney transplantation usually occurs within 1–2 years of dialysis initiation in pediatric patients with end-stage kidney disease. However, several programs did not consider her a suitable transplant candidate due to her immigration status, which also resulted in lack of transportation and lack of health insurance. After she graduated from high school, she could not obtain employment, and she could not drive. She remained at home with no prospects of improvement. In contrast, her younger sister was born in the United States, was a citizen, had a driver's license, and was working full-time. Residual kidney function declined over time while on PD, requiring the use of higher dextrose concentration dialysate and the addition of a daytime exchange. At age 24, the patient underwent a parathyroidectomy for secondary hyperparathyroidism. When last seen, the patient had been on PD for 10 years, and there were growing concerns regarding long-term exposure of the peritoneal membrane to high glucose dialysate and potential peritoneal membrane failure. The patient had never experienced an episode of peritonitis or an exit site infection – this was particularly impressive since she had been on PD for 10 years, started as a teenager, and performed exchanges independently. She became anxious and depressed at the risk of deportation and prospects for performing PD in her country of origin. Medical therapy for anxiety and depression was required. She developed symptoms of heart failure despite continued ultrafiltration with PD. Many attempts to obtain legal status failed over a period of years. I wrote letters supporting her application, to no avail. There seemed to be no solution for her medical and social problems. She was trapped on PD, past the expected technique survival. She would likely require transfer to hemodialysis. Would she be accepted to a local dialysis center given her immigration status?

Then, in June 2012, everything changed. President Barack Obama announced the Deferred Action for Childhood Arrivals (DACA) program. This allowed the patient a 2-year period of deferred action and eligibility for a work permit. In 2013 at age 25, she was accepted into the DACA program. She quickly obtained her driver's license and obtained a job. She worked for a year – while still on

PD – before qualifying for health insurance. With health insurance and legal immigration status, she then qualified for a kidney transplant and underwent uneventful kidney transplantation at age 27, 10 years after starting PD.

I am now seeing this patient in follow-up after transfer of her care to me by the kidney transplantation team. The patient is happy to see me today and states she is feeling well.

Problems

1. Kidney transplantation. The patient has been compliant and is tolerating her medications well. She reports no medication side effects, and her urine output remains good.
2. Hypertension is well controlled on losartan, 25 mg orally each day.
3. Anxiety and depression have nearly resolved post transplantation. She no longer requires medication.
4. The patient has returned to full-time work and is being considered for a promotion.
5. Systemic lupus erythematosus remains quiescent since the development of end-stage kidney disease.

Current medications include tacrolimus, 2 mg orally twice per day; mycophenolate mofetil, 500 mg orally twice per day; prednisone, 5 mg orally once per day; and losartan 25 mg orally once per day.

Physical Examination

Blood pressure 137/60 mm Hg, heart rate 80 beats per minute, regular, temperature 97.5°F. I was not the patient's nephrologist prior to her starting dialysis, and the change in her appearance is marked and unexpected: her sallow skin color (due to accumulation of uremic toxins) is replaced with normal skin color and tone. Moderate alopecia has completely resolved. She lost 30 lbs of fluid in the days following kidney transplantation, also noticeably changing her appearance. In short, she now appears as a healthy, 27-year-old young woman. The chest is clear. Cardiac examination reveals a normal S1 and S2. Abdominal examination reveals stretch marks from prior PD. There are 2 well-healed surgical incisions, one due to the removal of the PD catheter and one at the site of kidney transplantation. The renal allograft is non-tender, with no transplant renal artery bruit present. There is no peripheral edema.

Laboratory values reveal a blood tacrolimus level of 5.0 ng/mL (therapeutic). Blood urea nitrogen and serum creatinine levels are 14 and 0.9 mg/dL respectively.

Impression: The patient is doing extremely well post kidney transplantation. She had already outlived her expected survival while on PD, but with her kidney transplant, there is no reason that she should not function at a high level with this renal allograft for the next 10 years or longer.

Although she has received an extension from DACA, she remains concerned about what the future will bring.

Plan

We will continue to obtain laboratory studies every month for the next 6 months and then every 3 months. The patient will monitor her blood pressures and notify

me of any new problems. She will follow-up in transplant clinic annually.

As a physician, I care for each patient to the best of my ability and try to remain apolitical. However, there is no escaping the fact that the DACA act saved my patient's life. DACA has provided her with a bright future for the time being. I hope future legislation will provide her with a path to US citizenship, providing her the opportunity that was given to my own father in the past.

Disclosure Statement

The author declares no conflicts of interest.