Motives Underlying Husband/Wife Kidney Donation: A Case Report

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Renal transplantation has been developed in human over the past 50 years. The major limit in this form of renal replacement therapy is the shortage of kidney donors. It has been suggested that spouses are important sources of living-donor kidney grafts. Mental and behavioral health issues have been recognized to have important influences on the outcome of renal transplantation. Generally, the motive for donating an organ to a spouse or loved one is not apathy or guilt, but it is born out of love and great concern. We are reporting an unusual case of a renal transplant from a man to his wife in which the husband abandons the wife after the transplantation. Our aim is to emphasize the importance of psychological assessment of donors prior to transplantation.

Keywords • kidney transplantation • psychosocial evaluation • spouse

Introduction

Patients suffering from end-stage renal disease (ESRD) can continue to have an acceptable life-style with renal replacement therapy; either maintenance hemodialysis or renal transplantation.

Long-term survival and quality of life of ESRD patients is better with kidney transplantation.1, 2 The length of time on maintenance hemodialysis prior to transplantation negatively affects survival of patients suffering from ESRD. It is ideal for patients with ESRD to be transplanted after short periods of dialysis treatment. One of the main barriers for transplantation is the shortage of kidney donors especially that using the cadaver sources is not yet very practical in Iran. The solutions to increase the donor sources are few. One of the sources which has been considered since early 1990s, is kidney grafts from spouses or living unrelated donors (LURD). The outcome of kidney transplantation from the spouses is very promising,4 however, to prevent unpleasant events, there is a need for extensive psychological evaluation of donors prior to use of their organs.

Case Report

On October 23rd, 1989, a married 25-year-old housewife from Sari, Mazandaran Province, North of Iran was referred to a private nephrologist in Tehran, Iran for evaluation and management of nephrotic and nephritic syndromes. The patient had married a 29-year-old man in February, 1988. On May 28th, 1989 her first pregnancy had to be terminated because of severe hypertension with a blood pressure of 230/150 mmHg and eclampsia. The patient underwent a cesarean section in the 32nd week of pregnancy. Postoperatively, the patient fell in a coma for 48 hours. She was put on conservative therapy with intravenous magnesium sulfate and methyldopa. Her general condition gradually improved. The peripheral edema decreased, and her blood pressure returned to normal levels with a low salt diet and oral methyldopa. Her serum creatinine gradually decreased over a period of two months...
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down to 1.1 mg/dL from a peak of 3.1 mg/dL. However, the patient remained proteinuric and her newborn son expired with respiratory failure after one week.

When the patient was seen 5 months after the termination of pregnancy, she had trace edema, a supine blood pressure of 160/100 mmHg, and no complaints. A chest X-ray was unrevealing. Intravenous pyelography (IVP) revealed that the right kidney was larger than the left one. In urinalysis, the urine was yellow and clear with a specific gravity of 1.019 and 4+ protein; microscopic examination demonstrated 3–4 WBC/HPF, 0–1 RBC/HPF, and no casts. A 24-hour urine collection revealed 7.7 g of protein. The patient was not anemic and work-up for collagen vascular diseases and vasculitis was negative. Venereal disease research laboratory (VDRL) test was negative.

After renal biopsy and appropriate management for membranous nephropathy, renal function deteriorated and by October 1992, renal ultrasonography revealed bilateral small kidneys. An arteriovenous fistula was created for the patient and she was started on maintenance hemodialysis twice a week in November 1992. Her husband drove her to each dialysis session while they had to make a 220-kilometer trip to the nearest dialysis unit.

We initiated work-up for transplantation. Despite having four brothers and one sister who were willing to donate a kidney to the patient, the patient’s husband who was ABO compatible with her insisted on being the donor. Further work-up proved that he was a good candidate donor. The husband was very determined and serious about kidney donation and was very happy to find out that the work-up revealed he was an appropriate candidate for donation. A psychological evaluation of the husband was not performed as he refused such evaluation. His motives were not discussed with him either.

The patient underwent renal transplantation on December 10th, 1993 and her husband was discharged from hospital four days later with no complications following nephrectomy. The patient experienced immediate restoration of renal function following transplantation with a smooth posttransplant course. After three weeks, she was discharged on three medications: prednisolone, cyclosporine A, and azathioprine. The patient had no hospitalizations from then on. Eight years posttransplantation, she was normotensive with normal renal function and no proteinuria.

The husband, however, left the patient six months after her transplant. They lived separately for 18 months and got divorced two years posttransplantation despite the patient’s wishes and her request for continuation of their marriage. She was referred to a psychiatrist for depression and it was clear that, in retrospect, she would have preferred to have her husband instead of a functioning kidney. She would have been willing to remain on dialysis instead of having received kidney transplantation at the expense of the dissolution of her marriage.

Discussion

It is universally agreed that transplantation is the best option for renal replacement therapy and long-term survival of ESRD patients is better with kidney transplantation. The main barrier for the patients who are in need of renal transplantation is shortage of cadaver sources and living related donors. This widening gap between the demand and supply of donor kidneys has led to a need for an expansion in the potential donor pool. It has been suggested that spouses are important sources of living-donor kidney grafts because the graft survival rate is similar to that of parental donor kidneys despite poor human leukocyte antigens (HLA) matching.

Speculations exist regarding the exact mechanism for improved graft survival rates in living unrelated donor (LURD) transplantation. It has been suggested that medical compliance might be greater among patients whose spouses donate their kidneys. It has also been suggested that the recipients who have the type of family or emotionally related friends who would give a kidney might be more responsible patients.

The hope of LURD has been not only to address the shortage problem, but also to present the possibility that this type of donor selection can strengthen family ties and improve the quality of life for the couples involved. Although most of the time, both of the aforementioned goals are achieved, but there are some exceptions. The final outcome partly depends on the motivation of the donor. The motivation for donation of an organ to a living unrelated recipient could be from altruistic affection, undue familial pressure, or financial incentive. In many regions of the world, there is legislation and consensus that donors should be psychologically suitable for organ donation and
should undergo independent psychological scrutiny. A waiting period of several weeks is then required until the donor is allowed to donate the organ.

In our case, if the patient had not accepted the kidney from her husband, they might have continued to live together, and the patient would have been much happier. Of course, the husband may have simply wanted to donate the kidney in order to relieve himself of any moral obligation for leaving his wife afterwards. Another possibility is that the husband was afraid of the future of the kidney allograft and wanted no further obligation to his wife in the future. We also speculate that ambivalence and guilt may have played a significant role in his decision to donate a kidney and subsequently leave his wife. We tried to interview the husband, but he made himself unavailable to us.

This case, though unique, does not lend support to the role of emotion in compliance with immunosuppression and graft survival. Instead, it is a good example that perhaps, in some cases, cadaveric and living related donor kidney transplantations are better options despite concerns with regards to long waiting periods, HLA-matching, and the health of the donated kidney. Moreover, couples and emotionally related donor-recipient pairs should undergo more extensive and repeated psychological investigations prior to kidney donation to prevent adverse emotional and familial outcomes. Issues to be addressed in the psychosocial evaluation of living organ donors include: informed consent, the decision process, motivation, coercion, social support, behavioral health, psychological health, and coping.7

This case is testimony to the fact that in countries like Iran where living-donor transplantation is the main source of a kidney allograft, thorough psychological evaluation may help identify unfit donors and these practice guidelines should be mandated.

References