A Paradigm Shift Towards Quality of Kidney Transplantation in Iran

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Kidney donation and transplantation in Iran has passed a long history from the first kidney transplant in 1967, starting living related transplant in 1988 to 1989, adopting state-regulated living-unrelated donor kidney transplant program in 1988, religious approval from the Supreme Religious Leader for brain death in 1989, legislation law for cadaveric transplant in 2000, and increased number of cadaveric transplants, which put the country ahead of all country members of the Middle East Society for Organ Transplantation in performing deceased donor kidney and liver transplants in 2011 to 2012.[1] This long history encompasses the heroic efforts of physicians, nurses, and members of governmental and nongovernmental organizations who devoted their life to support the people suffering solid organ failures through hard years in the history of this country. For appreciation of our teachers, we should look at different aspects of this history and think if any complementary act can strengthen the cadaveric transplant frame.

In this issue of the *Iranian Journal of Kidney Diseases*, Heidary Rochi and colleagues[2] look at different aspects in cadaveric transplant program. In this article they have properly explained the need of increasing the number of cadveric transplantation to 16 per million people, which can cover the living unrelated donor transplant program. However, the question is that whether living unrelated program has any negative impact on cadaveric transplant growth. In the study of Ghods and colleagues,[3] the negative effect of unrelated living donation on related transplant has been reported. It seems that making some limits to unrelated living program can reinforce cadaveric transplant program, same as what has been done in Shiraz, Iran.

The second negative impact of the living unrelated transplant program has been a delay to set up a program to find well-matched human leukocyte antigen (HLA) antibodies. The importance of HLA matching to increase short- and long-term graft survival has been shown in all transplant registries.[4] Among the A, B, and DR antigens, Opelz[5] reported that matching for the HLA B and HLA-DR loci had an additive effect in cadaver kidney transplantation. The frequency of HLA DR polymorphism has not been evaluated in Iranian population, yet. Yari and colleagues[6] compared the HLA DRB1 alleles in acute leukemia patients to normal population. They reported that HLA DR-B1*11 was the most common allele in the DR-B1 group with a frequency of 20% in the normal population. It means we have the chance to find 1 DRB1 match in 5 donors. In the near future, we should add the best HLA match donor-recipient program in our transplant practice.

The importance of transplant registry to gather all data about donor and recipients and give us the long-term follow-up is an urgent need in our transplant practice .We should have our national registry program, which in future can share with all the Middle East Society for Organ Transplantation countries. Finally, we should have a look on our end-stage renal disease patients in hemodialysis and peritoneal dialysis units. Evaluation of transplant candidates within an appropriate time, avoidance of unnecessary transfusions, and management based on international guidelines should be added to hospital accreditation rating.

CONFLICT OF INTEREST

None declared.

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Is Joint Hypermobility Associated With Vesicoureteral Reflux?

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Generalized joint hypermobility (GJH) is an inherited connective tissue disease with joint hypermobility in the absence of a rheumatologic disease.[1,2] Generalized joint hypermobility occurs in about 66% of school children with arthralgia of unknown origin.[3] Some data suggest that GJH is more prevalent at earlier age and GJH patients often lead to normal lives.[4] Disorders and disabilities in different organs can be seen GJH.[5] Previous studies reported that children with GJH more frequently had sphincter dysfunction and nonneurogenic bladder. They believed that this condition manifested usually as constipation and possibly fecal soiling in boys and as urinary incontinence and possibly urinary tract infections in girls.[6]

In this issue of the *Iranian Journal of Kidney Diseases*, Pournasiri and colleagues reported the relationship of GJH with vesicoureteral reflux (VUR). They studied 313 pediatric patients with urinary tract infection. They evaluated GJH according to the Beighton scores among the study group. Then divided them into 2 groups based upon VUR screening. The results of this study showed that the frequency of GJH was 37.2% in the control group and 45.7% in patients without VUR and 62.3% in the VUR group. There was a significant difference in GJH frequency between the control group and VUR patients ($P < .001$; odds ratio, 2.79, 95% confidence interval, 1.61 to 4.82). The frequency of GJH was 44.1% in patients with mild VUR, 60.5% in moderate VUR, and 86.2% in severe VUR ($P = .003$). Therefore, GJH should be questioned and examined in children with VUR.[7] Recent studies have also shown an association between voiding and defecation dysfunction and GJH. They showed an increased rate of joint hypermobility in VUR patients. They concluded that an altered composition of the connective tissue of vesicoureteral junction may contribute to the severity of the VUR.[8] Some research suggested that children with voiding dysfunction have a significantly higher prevalence of GJH compared to normal children.[9]

Beiraghdar and coworkers evaluated GJH patients and showed an increased frequency of VUR in these patients. Since they reported a high prevalence of VUR in their study group (about 60%), they suggested that pediatric GJH patients