Prospects of kidney transplantation in Iraqi Kurdistan region

Editorial

Organ transplantation has witnessed dramatic progress and widespread optimism since its introduction with the first successful kidney transplant between identical twins in 1954. Organ transplantation has offered the hope of longer life and the promise of enhanced quality of life to hundreds of thousands of patients. Today organ transplantation is a standard treatment for renal failure, liver disorders, cardiovascular disease, end-stage pulmonary disease, and diabetes, among other conditions.

Kidney transplantation is cost effective in the long term, offers the chance of full rehabilitation and can be offered to a greater number of patients provided that there is a sufficient supply of organs. Dialysis should only be seen as a staging procedure to transplantation.

Treatment of end-stage renal disease in Iraq is an important public health issue. The prevalence of end-stage renal disease in Iraq and Iraqi Kurdistan region is unknown. Data from ten countries from the Middle East not involving Iraq estimated the prevalence to be around 352 per million population.

With the establishment of self-ruling Kurdistan region in Iraq in 1991 and under the wisdom of the Kurdish leadership and the regional government, many great and important achievements in different aspect of life have been attained to our nation. Development in the scientific and medical fields was not kept a part of these developments and achievements.

One of the fields that witnessed considerable development in Kurdistan is the field of Kidney transplantation. Even though kidney transplantation activities were only started in December 2006 in Erbil, these activities witnessed a dramatic success and have been carried out in a very good manner so far with the efforts and the experience of local medical doctors and trained health care workers. These activities have reduced the suffering and the financial burden of many patients who were in need of kidney transplantation.

Before initiating these activities in Kurdistan region, patients had to travel out of the region or out of the country seeking treatment for end stage kidney diseases. This was particularly difficult during the last few years as the kidney transplantation services were not regularly available in other parts of Iraq due to the unstable security situation.

When the Kurdistan kidney transplantation team participated in the 9th Congress of the Middle East Society of Organ Transplantation (MESOT) in Turkey in 2007, 25 kidney transplants were carried out. By now more than 500 kidney transplants have been carried out in Erbil alone with a high success rate.

With the establishment of kidney transplantation activities in Erbil, the experience was soon transmitted to the two other governorates of Sulaimania and Duhok. Kidney transplantation in Kurdistan is now well recognized in the region, Iraq as whole and outside Iraq.

Many patients from outside the region come to this region to have proper
treatment in this regard. This experience was well documented in the American Journal of Kidney Diseases and part of the experience is reported in the Saudi Journal of Kidney Disease and Transplantation.

Kidney transplants are currently performed at two sites in Erbil: Rizgari Teaching Hospital and Zheen International Hospital. In Erbil, a qualified and experienced team has been built from medical doctors in the relevant specialties and trained health care workers. The kidney transplantation activities have engaged many young medical doctors with the aim of providing sustainability to such activities. It is worth mentioning that three medical doctors from Erbil transplant team have become active members in different committees of the MESOT.

While prospects of kidney transplantation in Kurdistan region have improved substantially, significant challenges remain. The two major barriers to the overall success of transplantation are transplant rejection and the shortage of donor organs. Improvements in immunosuppressive drugs and clinical transplant care have led to excellent short-term patient and graft survival rates. However, long-term survival rates have improved relatively little in the past two decades and continue to be a challenge. Complicating the situation is the need for immunosuppressive medications with their associated side effects. Transplant specialists still lack effective strategies that consistently induce transplant tolerance, improve graft outcomes, and eliminate the need for ongoing immunosuppressive therapy. In Kurdistan region, kidney transplantation activities went through considerable development so far with the efforts of a dedicated and experienced local team from medical doctors and trained health care workers, but still this field suffers from important challenges including shortage of compatibility testing facilities and shortage of immunosuppressive drugs. Such shortage has potential adverse effect on the whole process.

In addition to the problem of transplant rejection, the demand for organ transplants far outstrips the supply of organs available. Unfortunately, many candidates continue to die while awaiting a suitable organ. The availability of donors remains a real challenge in transplantation. While a genetically suitable donor might not be available in most instances, there is always the opportunity to receive a kidney from an unrelated donor like emotionally related or other strongly motivated donors. It should be kept in mind that the special situation in Iraq might encourage emergence of commercial donors and therefore there should be appropriate measures to be taken to prevent commercialization of kidney donation. The Kurdistan regional ministry of health has established a special committee to oversee kidney transplantation activities including donor selection. However, there is still a dire need to develop more strict laws and guidelines by the government and the local professional associations to prevent emergence of wrongful practices. The success of transplantation as a life-saving treatment should not victimize the poor as the source of organs for the rich.

Finally, it is vital that the results of transplantation are documented in Iraqi Kurdistan region to ensure optimal use of scarce resources. Even though the activities of kidney transplantation
have witnessed a considerable development in a short period of time, little local literature has reported this experience so far.

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