

Kidney Transplantation from Brain Dead Donors: Why and Where Do We Stand?

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Abstract

Living organ donation is the most widely practiced type of donation in the Middle East and includes kidney and partial liver. It is predominantly genetically related, however, non-genetically related and commercial living organ donation do exist. Other sources of organ donation include organs obtained from a donor after brain stem death (BD) also called (cadaveric heart beating donors), or donation after cardiac death (DCD) previously known as non – heart beating donation.

The objectives of this paper are to explain the rationale of using organs from BD donors, highlight the concept of BD, show legal, religious and ethical related issues and demonstrate the international experience and status of BD organ (kidney) transplantation in Iraq.

Introduction

Chronic kidney disease (CKD) is a common and costly health problem in the Middle East. Hemodialysis (HD) is still the major modality of renal replacement therapy (RRT) in the Middle East ⁽¹⁾. In Iraq HD is almost the only type of chronic dialysis. There are no data available on adequacy of HD in our country. The mean duration of Iraqi patients on HD in one study was shown to be about 26 months, while it is 82 months in Jordan study ⁽²⁾, whether this is due to an excess mortality among our CKD patients, loss of follow up due to inadequate clinical reporting system, or other factors yet to be determined.

The ideal treatment for end-stage renal disease (ESRD) is kidney transplantation (KT). However, the considerable shortage of donor organs and the increasing number of patients with ESRD on KT waiting lists often have resulted in unacceptably long waiting times for an appropriate organ allograft ⁽³⁾. Other sources of

organ donation include organs obtained from a donor after brain stem death (BD) also called (cadaveric heart beating donors) after BD criteria were defined and adopted in 1968, or donation after cardiac death (DCD) previously known as non – heart beating donation ^(4,5) or even ABO – incompatible living donor kidney transplantation ⁽³⁾. Unfortunately paid living – unrelated (commercial) kidney transplantation or sometimes called (transplantation tourism) does exist and it is not only controversial for ethical aspects, but has been reported to result in serious complications in the postoperative period that cause high rates of morbidity and mortality, and it also carries the risk of a negative effect on local transplant programs ⁽⁶⁾.

Clinical issues of BD organ donation

Death can be considered in terms of medical, legal, ethical, philosophical, societal, cultural, and religious rationales. The medical definition of death is primarily a scientific issue based on