

THE SHORT AND LONG TERM COMPLICATIONS AND OUTCOME OF COMMERCIAL KIDNEY TRANSPLANTATION :A SINGLE CENTER STUDY

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Objectives:

Although many countries have passed legislation prohibiting monetary compensation for organ donation, some developing countries are considered as leading destinations for international travelers seeking inexpensive transplant tourism 1

Chronic kidney disease In Saudi Arabia is a growing problem, the number of patients on dialysis increased from 3968 in 1995 to 13190 in 2013, In the other hand 558 kidneys have been transplanted in the 2013, of this only 96 kidneys from deceased donors.2

Therefore ,for this wide gap between demand and supply in kidneys with long stay in waiting list, many patients with CKD prefer to go abroad for commercial kidney transplantation, The aim of this retrospective study is to show the impact of this kind of transplantation in patients and allograft and to see the immediate post-transplant complications, So that we make us to come with a recommendation against such notorious phenomena.

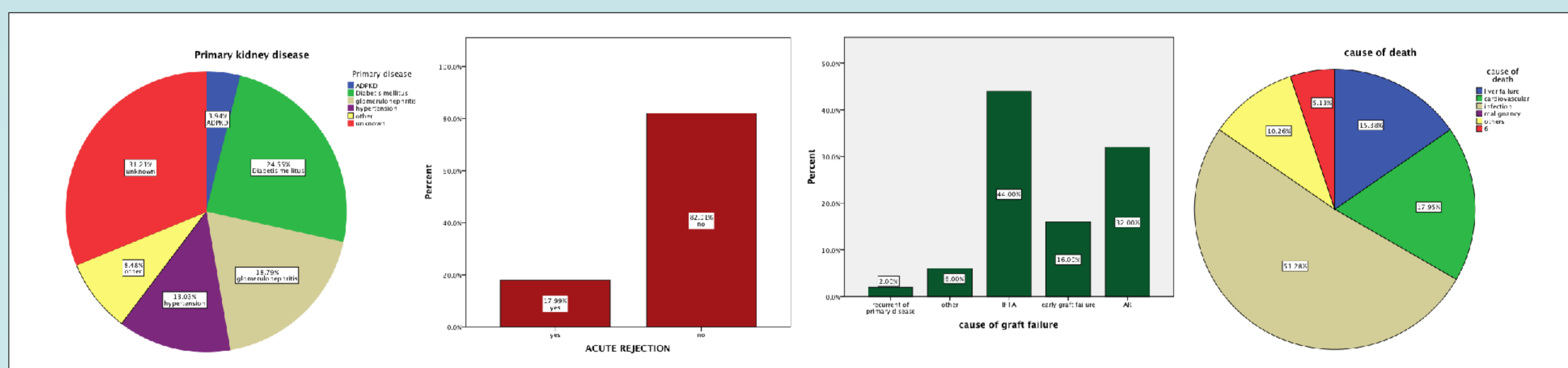
Methods:

We retrospectively reviewed data of all transplants patients who had been transplanted out side Saudi Arabia in the period between December 1990 until December 2010, and were admitted to security forces hospital, Riyadh for early post-transplant care and/or were regularly followed in the transplant clinic. Patients who received kidneys from living-related donors or deceased donors and those whom transplantation done in developed countries were excluded from study.

Patients who has positive HCV antibodies by ELISA , or detectable quantitative HCV PCR are considered as HCV positive. Immediate allograft failure was define those who never attained functioning allograft and either stay dialysis dependent or his creatinine remain around the same pre-transplant values. Acute rejection defined as either biopsy-proved, or based on a combination of clinical presentation, laboratory findings and response to anti-rejection therapy.

The cause of death was obtain from the patients deaths summary with review of preceding events or hospital course.

The data was analyzed using SPSS version 21.



Results:

Total number of patients is 330 (70% male , 30% female) , the mean age at transplantation was (41.8 ± 14.17)years , Diabetes mellitus was the leading cause of renal failure in 24.5% , followed by glomerulonephritis 18.7%, then hypertension 13% and polycystic kidney disease 4%. Regarding the modality of dialysis prior to transplantation, 75% of patients were receiving hemodialysis, while 18.24 were on peritoneal dialysis and 6.38% underwent preemptive transplantation, the mean duration of dialysis before transplantation were 17.9 months.

Most patients (82,4%) were hypertensive , 11.8 had evidences of ischemic heart diseases , and 10.8 % had hepatitis C virus infection ,However only 9 % of HCV-infected patients had been treated for HCV before transplantation.

The majority of patients received calcinurin inhibitor -based triple immunosuppressive therapy (CsA , MMF and predinsolone) in 59.4% , and (Tacrolimus, MMF and predisolone) in 25% of the studied patients, Add to that 45% of CsA group had been converted to tacrolimus .

There were 19 patients (5.7%) lost there allograft within the first post-transplantation week, severe antibody mediated rejection (AMR) was the culprit in 5 cases , and the other 14 patient lost their allograft due to vascular thrombosis (arterial or venous) , Surgical wound infection 4.8% , urinary leak 2.4%,and lymphocele 3.9%.

The incidence of acute rejection in 18% of the study patients (91% T cell mediated), allograft survival was 83%, the main cause of allograft failure was IFTA 40% , recurrent primary disease was found in 5 allograft biopsies.

New onset diabetes after transplantation (NODAT) was documented in 26% of non-diabetic patients, Persistently abnormal liver function test was observed in 26.5% of HCV group, in contrary that occur in only 2 patients of HCV-negative group, Important to mention that 2 of HCV group developed **Fibrosing cholestatic hepatitis** (FCH) .

Recurrent UTI was found in 3.6% the patients , with the mean underlying cause was uncorrected urinary tract abnormalities , 7 patients developed post-transplantation tuberculosis, 5 of them were extra-pulmonary TB, 3 patients developed CMV pneumonitis.

Patient's survival at 5 years is 87%. Interestingly the main cause of death was sepsis in 51% of death, while 18 % of death was due to cardiovascular events In Addition 15.4% died due to liver failure.

Conclusions:

Commercial kidney transplantation is carrying very high risk for early graft failure, risk of encountered infection in the peri-transplant period, and surgical complications, However if the early post transplant period passed safely the long term outcome is acceptable and comparable to other modalities of transplantation.

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