Results

Demographic Data Of Recipients :

Demographic of 27 recipients of cadaveric kidneys are presented in Table (2)

TABLE (2) Demographic Characteristics of the Study Sample n=27

Characteristics	Range	Mean
Age	(15-60)	38.8
Peak Panel Reactive Antibodies (P-PRA)	(10-97)	9.7

TABLE (3) Other Demographic Characteristics of The Study (n=27)

Characteristics	Number	Percent (%)
Race	18 Caucasian	66.7%
	9 Black	33.3%
Gender	18 Male	66.7%
	9 Female	33.3%
Living Donor Recipients(LDR)	3	11.1%

Cadaveric Donor Recipients(CDR)	24	88.9%
Kidney Recipients	22	81.5%
Pancreas Kidney Recipients(PKR)	5	18.5%

Table (4)Causes Of Renal Failure

Etiology	Number	Percent
Insulin Dependent Diabetes Mellitus(IDDM)	10	37%
Other Diseases	17	63%

Table (5) Transplant Status

Status	Number	Percent(%)
1st Graft	24	88.9%
2 nd Graft	3	11.1%

Recipients ranged from 15 to 60 years old with a mean age of 38.3 years. The peak panel reactive antibody (P-PRA) level had a range from 10% to 97% with a mean PRA of 9.7 Among the 27 transplants , 18 males (66.7%) and 9 females (33.3%) . Also eighteen (66.7%) Caucasian , and nine (33.3%) black patients.

Number of HLA mismatches between recipient and donor ranged from one to three with average of 1.3 Of these patients, recieved an ABO-identical graft.

We reviewed 27 recipients of cadaveric kidneys. Twenty two (81.5%) were kidney alone transplant recipients, while five patients (18.5%) recieved a combined kidney / pancreas transplant. All transplant recipients were from cadaveric donor except three (11.1%) living related donor ; of these , only one experienced rejection.

Four patients 14.8% experienced delayed graft function, but only six patients 22.2% experienced rejection in the early postoperative period; of these, only one experienced recurrent rejection episode. Mean time to first rejection episode was 15 days; however, half of the patients who experienced rejection had had the first episode by 7 days postransplantation.

Donors ranged from 10 to 61 years old with a mean age 32.9 years . The cause of death for most of donors was traumatic, and cerebrovascular accidents.

Pathology : Four recipients (14.8%) developed biopsy-proven rejection during the first 3 weeks after transplantation, one recipient (3.7%) after 7 weeks and only one recipient (3.7%) developed immediately hyperacute rejection. Renal dysfunction due to drug toxicity e.g. (Tubular interstitial nephritis) which ocuured in four recipients 14.8%.

Table (6) Relationship Between Monocytes and Rejection Outcomes

	Monocyte +	Monocyte-
Rejection	3	2
Norejection	2	20
Total	5	22

Sens=60%, Spec=91%, +Pred= 60%, -Pred= 91% , Effici= 85% (MO -cells)

Table (7) Relationship of Other Cellular Markers and Rejection Outcomes

	T-cell+	T-cell-	B+	B -
Rejection	2	4	3	3
No rejection	3	18	2	19

Sens=33%, Spec=85%, +Pred=40%, -Pred=81%, Effic=74% (T - cells)
Sens=50%, Spec=90%, +Pred=60%, -Pred=86%, Effic=81% (B - cells)

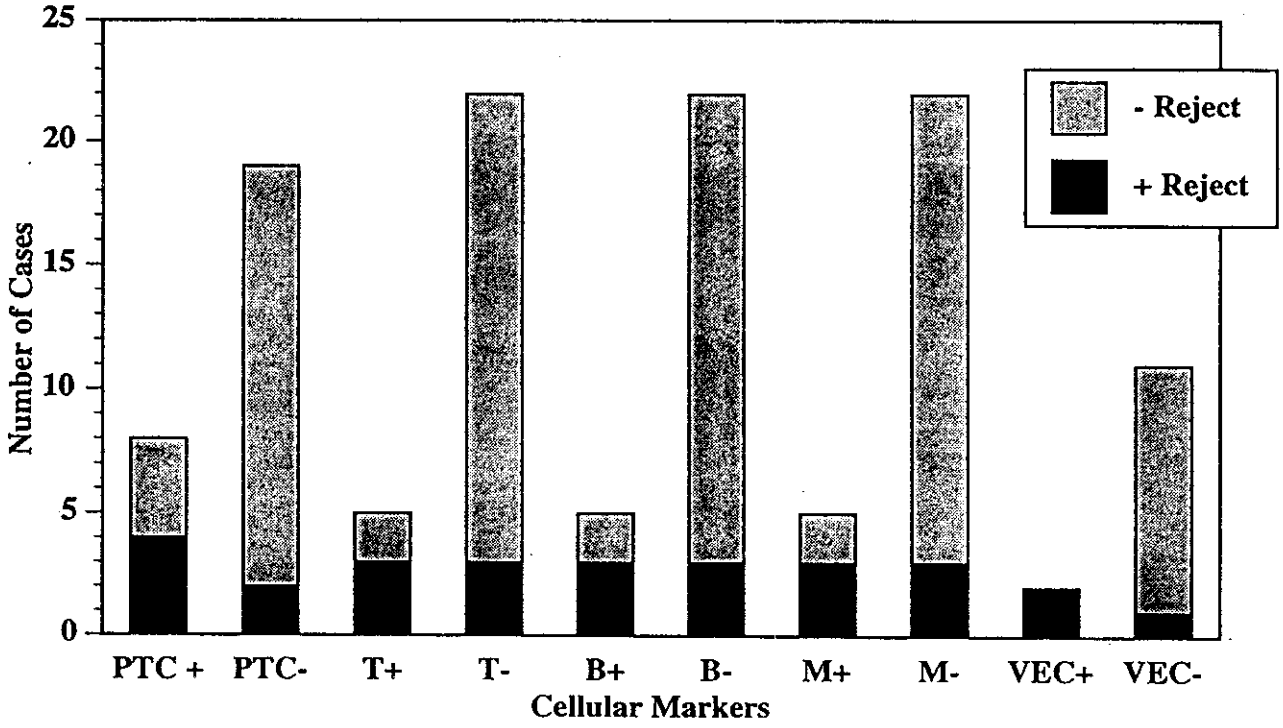

Figure 17. Number of Patients Experiencing Renal Allograft Rejection in the Presence of Specific Cellular Markers

Table (8) Concordance Of Monocytes and Vascular Endothelial Cell Antibodies.

	+VEC *	-VEC
+Monocyte	2(15%)	-
-Monocyte	-	11(85%)

* **P < 0.013**

* **Excluding cases where VEC crossmatch not done.**

* **Negative monocytes includes cases that were equivocal.**

Table (9) Concordance Of Monocyte and /VEC To the Allograft Rejection

	+VEC &Monocyte*	-VEC&Mo
Rejection	2(15%)	1(7.6%)
No Rejection	-	10(76.9%)

Sens=66.6% , Spec=100% , +Pred= 100% , -Pred= 90.9% , Effic=92.3%

* **P < 0.038**

* **Excluding cases where VEC crossmatch not performed**

Table (10) Concordance Of Peritubular Capillaries (PTC) and Anti-Endothelial Abs

	+Mon/VEC	-Mon/VEC	Total
Positive PTC	3 (37.5%)	5 (62.5%)	8 (29.7%)
Negative PTC	2 (10.5%)	17(89.4%)	19 (70.3%)
Total	5 (18.5%)	22 (81.4%)	27

Table (11) PTC Leukocytosis and Anti-Endothelial Abs as a Predictor of Rejection

	Positive Rej	Neg Rej	Total
+PTC/Anti-endothelial	4 (50%)	4 (50%)	8 (29.7%)
- PTC/Anti-endothelial	2 (10.5%)	17 (89.4%)	19 (70.3%)

Sensitivity = 50% **Specificity = 89.5%**

+ Predictive value = 66.6% **- Predictive value = 80.9%**

Overall Accuracy of the test = 67% **P < 0.044**

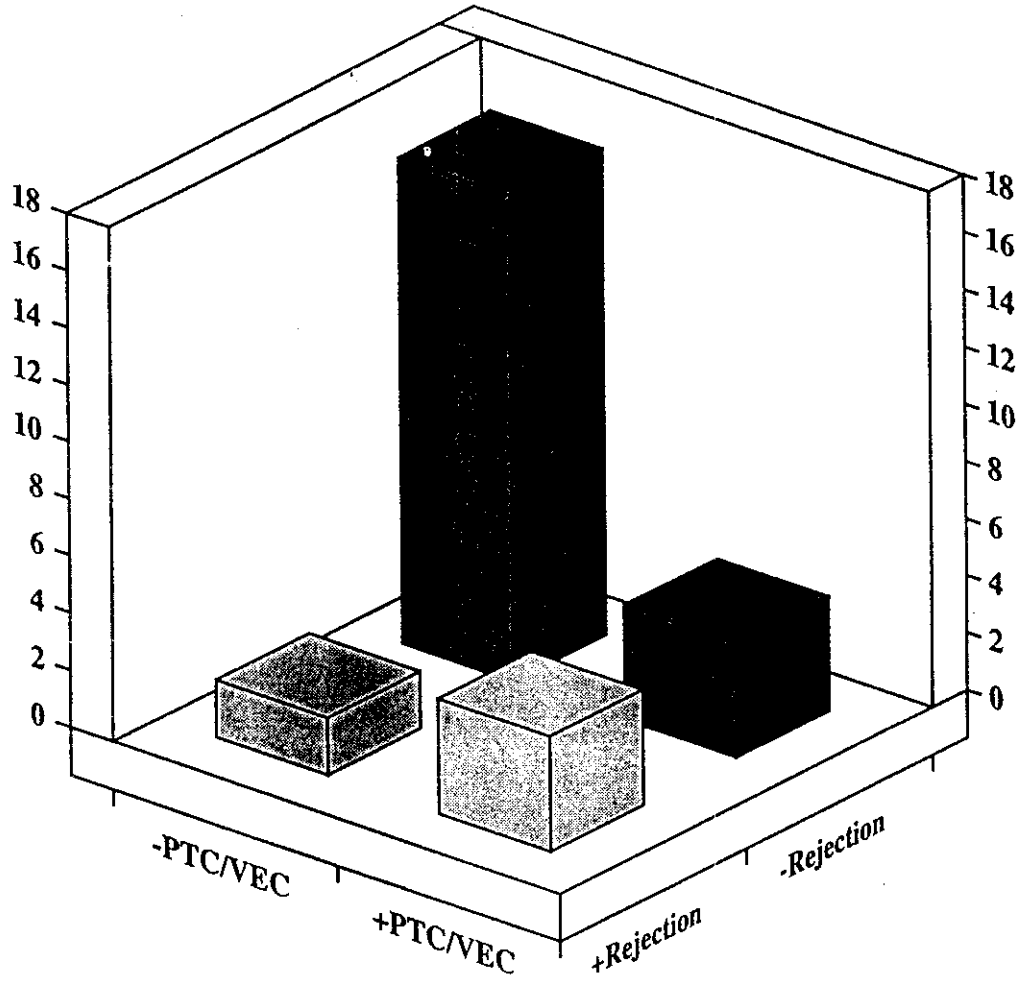

Figure 18. PTC Leukocytosis and Anti-Endothelial Antibodies as a Predictor of Rejection

Table (12) Discordant PTC Leukocytosis and Anti-Endothelial Antibodies as Predictor Of Rejection

	Rejection	No Rejection
+PTC and -Anti-End	3	0
-PTC and +Anti-End	2	0

Table (13) Predictive Ability Of Specific cellular Markers For Renal Allograft Rejection

	Sens (%)	Spec (%)	+PV (%)	-PV (%)	Accuracy (%)
Mon/VEC	66.6%	100%	100%	90.9%	92.3%
PTC/VEC	50%	89.5%	66.6%	80.9%	67%

Table (14) The Relationship Between PTC Sensitization and Other Markers.

PTC Sens	Tot n	+VEC n	+T n	+M n	Rej n
+PTC	8	2	1	3	4
-PTC	19	-	4	2	2

The Actual Survival Rate At One Year = 84%

$$= \frac{\text{Pts With Functioning grafts}}{\text{Total Number Of pts}}$$

Because the actual total number of the pts is = 27. There is no data for 2 pts. So finally the actual number is = 25. Four of them are graft lost, one of the four is dead with graft lost.