

EVOLUTION AND PROGNOSIS OF PATIENTS WITH SLE AFTER RENAL TRANSPLANTATION

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Introduction

Kidney transplantation has been associated with improved survival in patients with end-stage renal disease (ESRD) due to lupus nephritis (LN). However, recurrence of LN after transplantation remains a concern. Several studies show that there is greater survival and less activity after renal transplantation, Nevertheless, few studies evaluate the activity of extrarenal lupus after transplantation.

Objective

To establish renal and extrarenal lupus reactivation ratio in patients transplanted by Lupus Nephritis (LN)

Materials and methods

Multicenter retrospective observational study. We included patients with SLE criteria ACR/SLICC or ACR/EULAR 2019, renal transplanted by lupus nephritis older than 18 years in the last 10 years. Data were collected from the medical records of 5 centers. Demographic data, history of renal and cardiovascular disease, time to renal manifestation and dialysis, result of renal biopsy, data pertinent to transplantation, serologies and previous treatments, and post-transplantation serologies, extrarenal relapse, recurrence of LN and loss of renal graft, mortality per month \pm 15 days, at 6 \pm 1 month, at 24 months \pm 3 months, at 36 months \pm 6 months and at 5 years \pm 12 months, and follow-up time. The present study was approved by the Ethics Committee of the Güemes Sanatorium. The continuous variables are presented as means and standard deviation or with the median and quartiles according to the distribution of the variable. Categorical variables are represented as frequency and percentages.

Results

We analyzed 26 kidney transplants from 24 patients, 84.6% were women with a mean age at the beginning of LN of 22.3 \pm 8.47 years. 85.7% had class IV glomerulonephritis by biopsy, 4.76% class III and V, and 4.76% class VI. The mean time to LN from diagnosis of SLE was 30 \pm 23.1 months, and a median of 42.0 [6.75, 57.0] months from diagnosis to dialysis, and a median dialysis duration of 48 [24.0, 96.0] months. The mean age at transplantation was 36.9 \pm 11.2 years, the time from ESRD to transplantation was a mean of 86.4 \pm 49.3 months. 76.9% were from cadaveric donors. Induction was with thymoglobulin (91.3%) and thymoglobulin + plasmapheresis (4.35%). Maintenance was performed mostly with mycophenolate + tacrolimus (65.4%), with another combination (26.9%), and one drug (mycophenolate or azathioprine) (7.6%). The mean follow-up was 122.60 \pm 58.88 months. There were 2 deceased patients.

At 24 months a patient had extrarenal relapse and at 36 months another relapse, accompanied by graft loss due to rejection. At 36 months one patient had graft loss due to rejection. At 5 years, 2 patients had relapsed NL in graft, one of them required delay and then lost the graft due to rejection. The characteristics of these patients are detailed in Table 1.

Conclusion

Only one patient had extrarenal relapse after transplantation (4.1 %), two patients lost the graft due to rejection (8.3 %), and one due to relapse of LN. One patient had relapse of LN without graft loss. In our cohort, both renal and extrarenal relapse was very rare. More data is needed to establish the causes associated with these. As a limitation we had a lot of missing data.

Table 1. Characteristics of patients with relapse or graft loss

	Patient #1	Patient #2	Patient #3	Patient #4
Sex	Male	Female	Female	Female
Age at transplant (yr)	22	30	29	18
SLICC	3	4	3	Unknown
Time from disease onset to LN (mo)	0	0	48	12
Biopsy	Class IV	Class IV	Class IV	Class IV
Duration of dialysis (mo)	36	12	36	48 months
Time from CKD to transplant (months)	96	12	Unknown	Unknown
Donor	Cadaverous	Cadaverous	Alive	Cadaverous
Maintenance	Mycophenolate, tacrolimus	Mycophenolate, tacrolimus, Azathioprine	Cyclosporine, tacrolimus	Mycophenolate
Pre-transplant serologies	ANA Homogeneous nuclear IgM anticardiolipin +	ANA nuclear speckled, anti-DNA, anti-Ro and anti-La +	ANA nuclear speckled	ANA Homogeneous nuclear
Outcomes	Stroke (24 mo) Transverse myelitis (36 mo) Loss of graft due to rejection (36 mo) Death (84 mo)	Graft loss due to rejection (36 mo)	Relapse of lupus nephritis in renal graft (5 yr) Retransplantation and new loss of renal graft due to rejection (5 yr)	Relapse of lupus nephritis without loss of renal graft (5 yr)