# OUTCOMES IN RENAL TRANSPLANT RECIPIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: A SINGLE CENTER EXPERIENCE

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## INTRODUCTION

**Lupus Nephropathy (NL)** continues to be a major cause of morbidity and mortality in patients with **Systemic Lupus Erythematosus** (**SLE**). Although the prognosis of NL has improved considerably in recent years, end-stage renal disease (ESRD) develops in up to 10% of patients with SLE[1]. **Renal transplantation (RT) is considered the treatment of choice for these patients**. However, the prognosis of renal transplant recipients with SLE remains controversial.

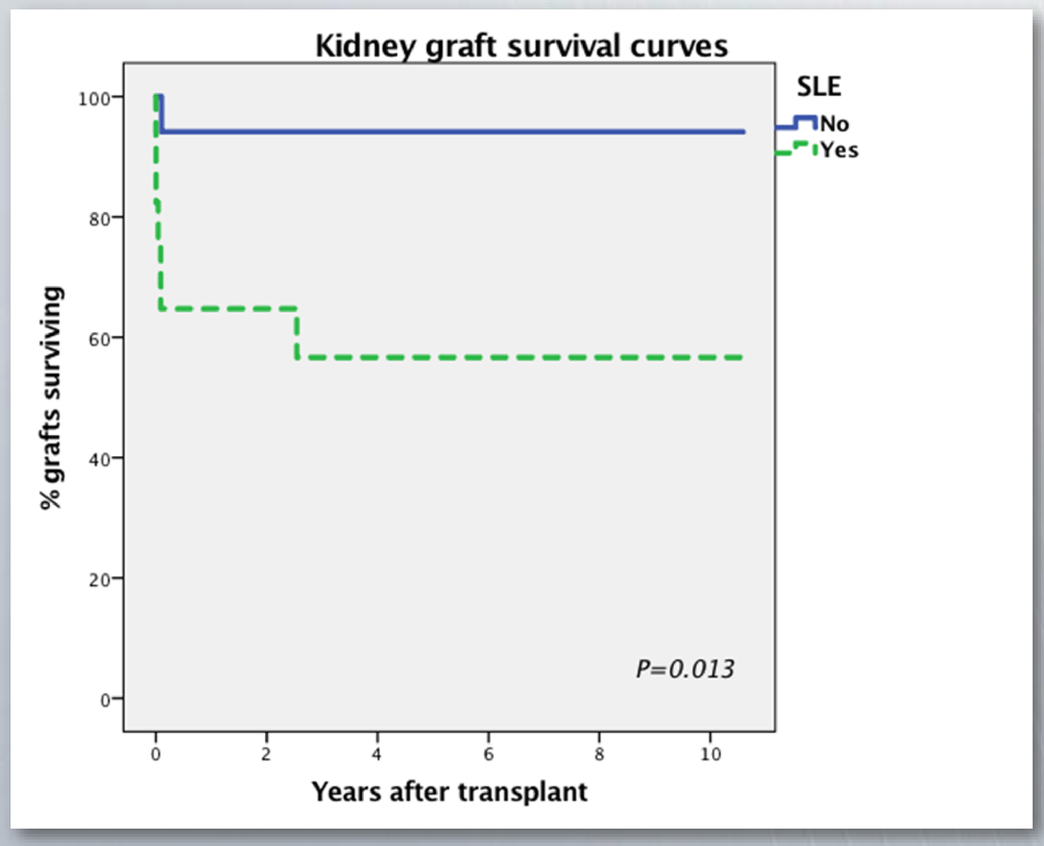
**Aim: Evaluate kidney transplantation outcomes for patients with SLE at a single center.**

## METHODS

We retrospectively studied all SLE patients who received a kidney allograft in our center between july 2005 and 2016. For comparative purposes a **control group (No-SLE)** was selected, matched for recipient **age**, **female recipient**, **living donor**, **retransplant**, **year of transplant** and **peak PRA ≥5%.** Patient and allograft outcomes were compared between cases and controls.

## RESULTS

There were **1190 kidney transplants** performed between **july 2005-2016**, including **17 in SLE patients [mean age 42.6 (31-51) years]. Mean follow-up** after renal transplantation was **4.3 (1.4-7.6) years**. In table 1 characteristics and outcomes in SLE and No-SLE kidney recipients are presented. From the Cox analysis performed, **SLE was the single independent predictor of graft failure (HR=8.93; P=0.041)**. **Early graft loss (<1 month after transplantation) was observed in 6 (35,3%) SLE patients, 5 due to intravascular thrombotic events and 1 due to a not functioning kidney**. Late graft loss occurred in 1 SLE patient due to chronic rejection. **SLE was significantly associated with shortened kidney graft survival, with 43.4 % of SLE grafts failing at 5 years, in contrast with only 5.9 % No-SLE.**




| | No SLE N=17 | SLE N=17 | *P* |
|---|---|---|---|
| Recipient age (years), median (IQR) | 36 (29-48.0) | 42.6 (31-51) | 0.734 |
| Donor age (years), mean±SD | 47 (39-56) | 39 (24-55) | 0.315 |
| Female recipient, n (%) | 16 (94) | 16 (94) | 1 |
| Female donor, n (%) | 5 (29) | 5 (29) | 1 |
| Living donor, n (%) | 6 (35) | 6 (35) | 1 |
| Retransplant, n (%) | 2 (12) | 1 (6) | 1 |
| Year of transplant, median (IQR) | 2009 (2007-2011) | 2010 (2007-2013) | 0.375 |
| Dialysis vintage (years), median (IQR) | 4.2 (0.7-7.6) | 4.1 (0.7-6.0) | 0.643 |
| CKD etiology, n | | | - |
| SLE | | 17 | |
| GN chronic | 11 | | |
| ADPKD | 2 | | |
| Unknown | 4 | | |
| HLA mismatch, mean±SD | 4.00±1.26 | 4.06±1.48 | 0.669 |
| Peak PRA ≥5%, n (%) | 4 (24) | 4 (24) | 1 |
| Induction, n (%) | 1 (6) | 3 (18) | 0.270 |
| None | 15 (88) | 11 (65) | |
| Basiliximab | 1 (6) | 3 (18) | |
| ATG | | | |
| DGF, n (%) | 3 (18) | 1 (6) | 0.603 |
| AR, n (%) | 3 (18) | 3 (18) | 1 |
| Graft failure, n (%) | 1 (6) | 7 (41) | 0.039 |
| Patient death, n (%) | 0 | 0 | 1 |

Table 1: Characteristics and outcomes in SLE and No-SLE kidney recipients.

## CONCLUSIONS

In our study, SLE kidney recipient patients had a significantly shortened kidney graft survival. The risk for thrombotic complications was greater among SLE patients due to the high number of thrombotic complications observed shortly after transplant.

Identifier/Topic: Renal transplantation. Epidemiology and outcome.

Bibliography:

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