THU0348

TIME ON DIALYSIS ADVERSELY AFFECTS RENAL TRANSPLANT OUTCOME IN LUPUS NEPHRITIS

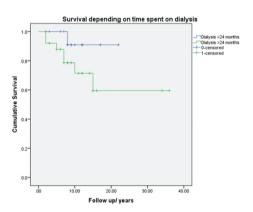
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Background: Lupus nephritis (LN) is an important cause of morbidity and mortality in patients with systemic lupus erythematosus (SLE) often leading to end stage renal failure (ESRF) and necessitating renal transplantation. However, the optimal timing of transplantation in SLE patients with ESRF is uncertain and could potentially affect survival.

Objectives: We investigated time spent on dialysis before renal transplantation and survival following the transplantation in a cohort of SLE patients.

Methods: Retrospective analysis of all adult SLE patients undergoing renal transplantation over a 40 year period (1975-2015) in two tertiary UK centres followed up until 2017. Cox proportional hazard regression and receiver operator curves (ROC) were used to determine the risk associated with time on dialysis before the transplantation and other potential predictors.

Results: Forty patients (age 35±11 years, 34 female, 15 Caucasian, 15 Afro Caribbean and 10 South Asian underwent transplantation. During a median follow up of 104 months (IQR 80,145), 8 (20%) patients died and the five year survival was 95%. Univariate analysis identified time on dialysis prior to transplantation as the only potentially modifiable risk predictor of survival with a Hazard Ratio of 1.013 for each additional month spent on dialysis (95% CI=1.001-1.026, p=0.03). ROC curve demonstrated that >24 months on dialysis had an adverse effect with sensitivity of 0.875 and specificity 0.500 for death. No other modifiable predictors were significantly associated with mortality, indicating that time on dialysis had an independent effect.



Abstract THU0348 - Figure 1. Kaplan-Meier estimator plot between patients who had less than 24 months of dialysis (blue line) or more than 24 months (green line), suggesting a trend of almost threefold risk of survival in those spending longer time on dialysis, HR 2.84 log rank p=0.15.

Conclusions: Increased time on dialysis pre-transplantation is an independent modifiable risk factor of mortality in this cohort of patients with lupus nephritis and should be one of the factors considered for patient selection to transplantation. Disclosure of Interest: None declared

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THU0349

ANTIBODIES TO PHOSPHATIDYLSERINE-PROTHROMBIN COMPLEX AND ANNEXIN V AS RISK FACTORS FOR THE DEVELOPMENT OF THROMBOTIC COMPLICATIONS IN PATIENTS WITH SYSTEMIC LUPUS **ERYTHEMATOSUS**

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Background: Seronegative antiphospholipid syndrome (APS) is a type of APS where the diagnostic levels of "classical" antiphospholipid antibodies (aPL) are not detected, though antibodies to the phosphatidylserine-prothrombin complex (aPS-PT) and anti-annexin V antibodies can be present. The role of these antibodies in the diagnosis of APS needs to be clarified.

Objectives: To study the prevalence of aPS-PT and anti-annexin V antibodies and their role in the development of thrombotic complications.

Methods: 79 SLE patients were enrolled in the study (M/F 7/72; mean age 11.0 The main group consisted of 38 SLE patients with thrombotic complications and/or obstetric complications (mentioned in the classificational criteria for APS), a comparison group consisted of 41 SLE patients without thrombotic/obstetric complications. The groups were comparable in age, duration and

ELISA was used to test for aPL: anticardiolipin (aCL) IgG and IgM, anti-β2-glycoprotein-1 antibodies IgGAM (anti- β2GPI), antibodies to phosphatidylserine-prothrombin complex (anti-PS/PT) IgG/M, anti-annexin V antibodies IgG/IgM. Lupus anticoagulant (LA) was evaluated using the DRVV test method.

Results: In 11 patients (29%) of the main group "classical" aPL were not detected, although one SLE patient with thrombosis had elevated levels of antibodies to annexin V IgG (>5 U/ml).

Sensitivity and specificity of aPL for the diagnosis of APS in patients with SLE were 19% and 96% for anti-PS/PT, 11% and 94% for anti-annexin V antibodies IgG, 11% and 88% for anti-annexin V antibodies IgM respectively.

When comparing two groups using rank test, significant differences were revealed for aCL IgG, anti-β2GPI IgGAM levels(p<0.05); there were no significant differences between the main group and the comparison group (p>0.05) for levels of aCL IgM, aPS-PT and anti-annexin V antibodies. A positive correlation was revealed between the level of aPS-PT and the following aPL: LA (r=0.45, p=0.00006), aCL IgM and IgG (r=0.4 and r=0.45, p<0.001), anti-annexin V antibodies IgM and IgG (r=0,72 and r=0,47, p<0,001).

In a subgroup with elevated aPS-PT levels (>16 U/ml, 6 patients) thrombotic complications, venous thrombosis and its recurrence developed significantly more often than in a subgroup with a normal aPS-PT levels (OR=3.4, p=0.02, OR=4.1, p=0.02, OR=1.5, p=0.01, respectively).

Conclusions: 1. Anti-annexin V antibodies IgG and IgM have high specificity (94% and 88% respectively), but low sensitivity (11% and 11% respectively) for diagnosis of APS in SLE patients.2. A level of aPS-PT has a positive correlation with both "classical" aPL and anti-annexin V antibodies, and has a sensitivity of 19% and a specificity of 96% for the diagnosis of APS in SLE patients. 3. Elevated levels of aPS-PT (>16 $\,$ U/ml) increase the incidence of thrombotic complications in patients with SLE.

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THU0350

TIME DEPENDENT ASSOCIATION OF ACTIVE RENAL DISEASE WITH IRREVERSIBLE ORGAN DAMAGE **ACCRUAL IN SYSTEMIC LUPUS ERYTHEMATOSUS**

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Background: Lupus nephritis (LN) is a common feature of systemic lupus erythematosus (SLE). While LN is considered a contributor to irreversible organ damage in SLE, the magnitude of impact of active renal disease relative to other contributors to damage accrual is unknown.

Objectives: To determine the time-dependent association of active lupus nephritis (LN) with organ damage accrual in SLE.

Methods: This study was performed on patients from the Asia Pacific Lupus Collaboration (APLC) cohort. SLE Disease Activity Index-2000 (SLEDAI-2k) is collected per-visit and SLICC-ACR Damage Index (SDI) annually. Analysis was restricted to patients with ≥2 SDI scores. Active LN was defined if patients had urinary casts, proteinuria, haematuria or pyuria as indicated in the SLEDAI-2k descriptor. Organ damage accrual was defined as a change of SDI (ΔSDI>0) between baseline and final visit. Glucocorticoid (GC) categories were defined according to cumulative GC exposure at each visit as either no GC (cum.GC=0); low GC (cum.GC ≤median) or high GC (cum.GC >median). Cox regression analyses were performed.

Results: 1735 patients and 5593 visits were included in the analysis. 93% of patients was female with a median ([inter-quartile range (IQR), (range)] age of 40 years.^{31, 51} ^{18, 77} Median study observation period was 853 days [621, 1094].⁹⁷ 36% were Chinese; 20% Thai and 10% Caucasian ethnicity. 82% of patients were