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 the effect of 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 (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 of 0.500 for death. No other modifiable predictors were significantly associated with mortality, indicating that time on dialysis had an independent effect.

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


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

E. Rehling,1 I. Belaeva,1 V. Mazurov,1 S. Lapin,2 O. Tkachenko,2 V. Guseva, O. Inamova1
1North-Western State Medical University named after I. I. Mechnikov, Saint Petersburg, Russia; 2St. Petersburg State Medical University named after I. P. Pavlov, Clinical Rheumatological Hospital No 25, St. Petersburg, Russian Federation

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 phosphatidyserine-prothrombin complex (PSPC) and 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 (MF 7:22, mean age 11.0 years, range 5.3–21.0). The main group consisted of 38 SLE patients with thrombotic complications and/or obstetric complications (mentioned in the classification criteria for APS), a comparison group consisted of 41 SLE patients without thrombotic/obstetric complications. The groups were comparable in age, duration and SLE activity.

ELISA was used to test for aPL: antcardiolipin (aCL) IgG and IgM, anti-β2-glycoprotein-1 antibodies IgGAM (anti-β2GPI), antibodies to phosphatidyserine-prothrombin complex (anti-PS-PT) IgG/M, annexin V antibodies IgG/M. 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. A positive correlation was revealed between the level of aPS-PT and the following aPL: LA (r=0.45, p=0.00006), anticardiolipin IgG and IgM (r=0.4 and r=0.45, p<0.001), anti-annexin V antibodies IgG and IgM (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 were more frequent than in 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 specificity 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.

Disclosure of Interest: None declared