

mononuclear cells were analysed by flow cytometry. Patients completed a scored questionnaire addressing sun exposure history prior to disease onset. The questionnaire, flow cytometry and ELISA results were analysed using Mann-Whitney test.

**Results** Questionnaire responses indicate increased sun exposure prior to disease onset in SLE patients with skin disease when compared to SLE patients without skin disease (median score=60 versus 32, respectively;  $p<0.05$ ). Anti-desmoglein-3 auto-antibody levels were higher in the serum of SLE patients with skin disease than in patients without skin disease (median=0.571 versus 0.123 IU, respectively;  $p<0.05$ ). T-follicular helper (TFH) cells stimulate B-cells to produce auto-antibodies via IL-21. There was a trend to enhanced IL-21 production in SLE with skin lesions compared to SLE without skin (median=34 versus 19%, respectively).

**Conclusions** SLE patients with skin disease have a history of higher antecedent sun exposure consistent with the hypothesis that sun exposure is an environmental trigger. The resulting immune activation of the skin may be reflected in aberrant skin-specific antibody production and heightened IL-21 secretion by TFH cells.

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#### RISK FACTORS ASSOCIATED WITH THE OCCURRENCE OF AUTOIMMUNE HEMOLYTIC ANAEMIA IN SYSTEMIC LUPUS ERYTHEMATOSUS

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**Background and aims** Almost all systemic lupus erythematosus (SLE) patients develop haematological abnormalities during their disease course. Autoimmune hemolytic anaemia (AIHA) was reported in 5%–14% of SLE patients which is usually mediated by warm-type IgG anti-erythrocyte antibodies. There is still paucity data about risk factors associated with the occurrence of AIHA in SLE patients. The aim of this study is to know risk factors associated with the occurrence of AIHA in SLE patients.

**Methods** This study was a retrospective cohort single centre study from 2013–2015 from our general hospital, Karawaci, Tangerang, Banten, Indonesia. The criteria of SLE patients were using American College of Rheumatology (ACR) criteria. The data were from our medical records database. The criteria of AIHA were based on American Society Haematology (ASH) criteria. Clinical data and risk factors of AIHA patients were reviewed and analysed. Anti-nuclear antibody (ANA) and anti-dsDNA were detected using indirect immunofluorescence test (IFA-Bio-Rad, USA).

**Results** Fifty-seven patients were included, of whom 93% were female with a median age of 36 (12–72) year old. AIHA patient found in 57.9% of the patients with positive IgG antibody to erythrocyte. ANA was positive in 84.2% and anti-dsDNA was positive 75.4%. Positive ANA, OR 1.91 (0.45–8.02); positive anti-dsDNA 2.25 (0.66–7.76); decreased complement3 (C3) 0.77 (0.23–2.51); decreased C4 0.67 (0.21–2.16); decreased albumin level 0.82 (0.23–2.92); thrombocytopenia 3.19 (1.01–10.05), leucopenia 0.95 (0.30–3.0) did not significantly related to AIHA.

**Conclusions** The proportion of AIHA in SLE patients 57.9%. Positive ANA, anti-dsDNA, decreased C3, C4,

hypoalbuminemia, thrombocytopenia, and leucopenia were not statistically significant.

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#### EFFECT OF COMPLETE OR PARTIAL PROTEINURIA RECOVERY COMPARED TO NO RECOVERY AT 2 YEARS AFTER THE DIAGNOSIS OF LUPUS NEPHRITIS ON LONG TERM OUTCOMES

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**Background and aims** To evaluate the effect of Complete Recovery (CR), Partial Recovery (PR), and No Recovery (NR) at 2 years from diagnosis of LN on long term outcomes.

**Methods** Patients with LN (proteinuria in 24 hour urine [24H-P]>0.5 g/day) were studied. At 2 years from LN, patients were divided into CR, PR and NR. Long-term outcomes were studied up to 15 years. CR was defined as normal 24H-P, PR as a reduction  $\geq 50\%$  in 24H-P without achieving CR and NR as a reduction  $<50\%$  24 hour-P compared to baseline. Long term outcomes: Renal outcomes (low eGFR  $<15$  mL/min, end-stage renal disease requiring dialysis or transplantation [ESRD], and a Composite Renal Outcome [low eGFR or ESRD]); Cardio-Vascular (CV) outcomes (angina or myocardial infarction); Damage (SDI $\geq 1$ ); and Death. Time-independent and time-dependent Cox proportional hazards models were applied to describe the effect of CR, PR or NR on long-term outcomes.

**Results** Of 277 patients, 63.9% achieved CR, 18.41% PR, and 9.75% NR at 2 years. CR protected from all long-term outcomes compared to PR and NR on Kaplan-Meier analysis and Cox model (Figure 1). CR protected against CV outcomes only in the Cox model. Compared to NR, PR only protected against low eGFR. Neither CR nor PR protected against damage. On time-dependent analysis, when comparing CR to NR and PR to NR, only NR was a risk factor for ESRD when compared to CR (HR=3.93).

**Conclusions** CR protects against CV and renal outcomes, and mortality. PR protects against low eGFR.

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#### RELATIONSHIP BETWEEN INCREASED LEVELS OF ANTI-DSDNA WITH CLINICAL SYMPTOMS IN PATIENTS WITH SLE

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**Background** Systemic Lupus Erythematosus (SLE) is an autoimmune rheumatic disease characterised by widespread inflammation and affects any organ or system in the body. Many autoimmune diseases result in autoantibody production, but anti-dsDNA antibodies are highly specific to SLE. Previous study found that Anti-dsDNA antibodies are associated with severe clinical manifestations of lupus.

**Objective** To examine the association between anti-dsDNA level with clinical features and laboratory findings in patients with SLE.

**Methods** This cross-sectional study was conducted in the Haji Adam Malik General Hospital Medan in August-October 2016