

improve survival rates. These results should be evaluated prospectively in future studies to find the prediction power in the differentiation of flare and sepsis in this group of patients.

202

THE ROLE OF NEUTROPHIL-LYMPHOCYTE RATIO(NLR), AND OTHER BIOMARKERS (C – REACTIVE PROTEIN CRP, COUNT OF MONOCYTES AND LYMPHOCYTES) DIFFERENTIATING LUPUS ACTIVITY (FLARE) FROM INFECTION

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Background and aims Systemic lupus erythematosus (SLE) is one of the most prevalent connective tissue diseases, it is commonly associated with an infection being so difficult to differentiate if the systemic inflammatory response is secondary to a bacterial infection, or to the underlying autoimmune activity (FLARE). The aim of this study was to determine the utility of C reactive protein (CRP), neutrophil-lymphocyte ratio (NLR), count of monocytes, and lymphocytes in patients with positive cultures and flare.

Methods A retrospective study was conducted, 58 patients with SLE were admitted to the intensive care unit (ICU) at a University Hospital in Bogotá, Colombia, between 2008 and 2017. Bivariate analysis was performed to identify if there was a possible association with positive cultures in patients with (flare)

Results In patients with lupic activity (SLEDAI:8–12) NRL was consistently associated with flare, NRL >10 (OR: 17; 95% CI 2.13 to 136.8, p=0.007), count of lymphocytes <500 cells/mm³ was associated with lupic activity (OR: 6.33; 95% CI 1.30 to 30.7, p=0.022), in severe lupic activity de CRP did not show association; one variable consistently associated with positive cultures in the logistic regression model with adequate prediction parameters: absolute count of monocyte >400 cell/mm³ (OR: 3.51; 95% CI 1.13 to 10.88, p=0.029), the others variables NRL, CRP showed no association with positive cultures.

Conclusions The (NRL) >10 Could help to differentiate LES activity from infection, leading to early antibiotic therapy, or immunotherapy to improve survival rates. These results should be evaluated prospectively in future studies.

SLE Organ manifestations: clinical and pathogenesis

203

EYE MANIFESTATIONS OF LUPUS

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Background and aims The body is one unit and the ultimate care of a patient with a multisystem disease such as lupus requires the integrated care of several specialists. Systemic

lupus has some potentially blinding ocular complications such as lupus retinopathy. Early detection of these complications by the ophthalmologist can help salvage vision of the patient. Moreover, some cases present first to the ophthalmologist, so an ophthalmologist trained in detecting the ocular manifestations of multisystem diseases can refer the patient promptly to the rheumatologist and help minimise the disease-associated morbidity. The aim of this study was to describe the ocular manifestations of lupus in patients who presented to the main university hospital in Alexandria from July 2014 to March 2016.

Methods A prospective study was conducted and included 128 patients with lupus. A thorough ophthalmic examination was conducted by the author using the slitlamp biomicroscope and a fundus lens

Results Out of the 128 patients, 61 patients had lupus retinopathy at time of presentation or developed it *de novo* during the period of the study. Thirty two patients had lupus keratopathy. And eighty one patients had dry eye of various degrees of severity, 3 of them culminated into potentially sight threatening corneal ulcers. Communication with the treating rheumatologists was done and an overall 81% improvement in ocular lupus patients was achieved by the end of the study. One patient lost one eye due to late presentation

Conclusions Lupus is a potentially blinding disease requiring full cooperation between the ophthalmologist and the rheumatologist.

204

SINGLE CENTRE EXPERIENCE WITH 150 SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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Background and aims Systemic lupus erythematosus (SLE) is an autoimmune disease with diverse clinical manifestations. Here, we present 150 patients with SLE attending our clinic between January and November 2016.

Methods Demographics, clinics, laboratory findings, Systemic Lupus Erythematosus Disease Activity Index (SLEDAI), Systemic Lupus International Clinics (SLICC)/American College of Rheumatology (ACR) damage index scores and treatments were analysed. Diagnosis was confirmed with 1997 ACR or 2012 SLICC classifications. Chi-squared or Fisher's exact tests were used for statistical analysis.

Results General characteristics are presented in Table 1. Clinics are presented in Table 2. Treatments patients ever received are presented in Table 3.

Conclusions SLICC damage was positive in patients receiving pulse steroids (57%), cyclophosphamide (51%), rituximab (73%). In long term, 3 (2%) patients had pulmonary

Abstract 204 Table 1 General characteristics

Age (years)	46±12.8
Disease duration (months)	121.3±92.4 (min-max:6–132)
Gender (Female/Male)	139 (92.7%)/11 (7.3%)
SLEDAI	min-max:0–30, median:1.5
SLICC/ACR damage index	min-max:0–5, median:0

Abstract 204 Table 2 Clinical characteristics (n,%)

Muco-cutaneous	108 (72%)
Arthritis	100 (66.7%)
Renal disease	72 (48%)
Leukopenia/lymphopenia	94 (62.7%)
Hemolytic anaemia	13 (8.7%)
Thrombocytopenia	28 (18.7%)
Serositis	30 (20%)
Nervous system disease	11 (7.3%)
Anti-phospholipid Syndrome	24 (16%)

Abstract 204 Table 3 Treatment (n,%)

Steroid/pulse treatment	149 (99.3%)/38 (25.3%)
Hydroxychloroquine	150 (100%)
Azathioprine	107 (71.3%)
Mycophenolate mofetil	55 (36.7%)
Cyclophosphamide (iv)	45 (30%); 10±4.5 cycles
Rituximab	15 (10%)
Warfarin	31 (20.7%)
Intravenous immunoglobulin (IVIG)	3 (2%)
Plasmapheresis	2 (1.3%)

hypertension, 21 (14%) had avascular necrosis, 6 (4%) had malignancy. SLE is an autoimmune disease requiring multi-faceted approach.

205

ANNEXIN II-BINDING IMMUNOGLOBULIN G LEVEL CORRELATES WITH CLINICAL AND RENAL HISTOLOGICAL DISEASE ACTIVITY IN LUPUS NEPHRITIS

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Background and aims Annexin II mediates anti-dsDNA antibody binding to mesangial cells and downstream inflammatory and fibrotic processes. We investigated the relationship between annexin II-binding IgG and clinical or histological activity in lupus nephritis.

Methods Serial serum samples from 28 patients with Class III/IV±V lupus nephritis were studied. Annexin II-binding IgG level was measured with an in-house ELISA. Glomeruli were isolated from NZBWF1 mice, gene and protein expression of annexin II and its binding protein p11 were investigated by real-time PCR and cytochemical staining respectively. Ultrastructural localization of annexin II was determined by electron microscopy and immunogold staining.

Results Annexin II-binding IgG level was associated with anti-dsDNA level and disease activity in 42% of lupus nephritis patients. Annexin II-binding IgG level correlated with Activity Index ($r=0.44$, $p=0.04$), leukocyte infiltration score ($r=0.52$, $p=0.02$), and karyorrhexis/fibrinoid necrosis score ($r=0.66$, $p=0.002$) in renal biopsies, and also with the amount of mesangial electron-dense deposit scored semi-quantitatively ($r=0.63$, $p=0.009$). Glomerular annexin II and p11 expression increased with disease progression in NZBWF1 mice, and

annexin II was found on the surface of mesangial cells and in the mesangial matrix, co-localising with electron-dense deposits.

Conclusions Our data demonstrated an association between annexin II-binding IgG level and clinical/histological disease activity in proliferative lupus nephritis. Co-localization of annexin II with electron-dense deposits suggests a pathogenic role for annexin II.

206

INCREASED URINARY HEPARANASE LEVELS ARE ASSOCIATED WITH ACTIVE LUPUS NEPHRITIS

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Background and aims Heparan sulfate in glomerular basement membrane is crucial for charge-selective filtration. Heparanase, an endoglycosidase that cleave heparan sulphate, is reported to be up-regulated in several proteinuric diseases. We investigated the association of urinary heparanase level with renal indices in patients with systemic lupus erythematosus (SLE).

Methods Urinary samples were collected from 76 patients with lupus nephritis (LN; 51 active and 25 inactive), 63 SLE patients without renal involvement and 28 healthy individuals (HC). Heparanase levels were measured by ELISA and normalised by urinary creatinine level (mU/mg).

Results Urinary heparanase levels were increased in SLE patients than HC ($p<0.001$). Patients with active LN had significantly higher urinary heparanase levels compared to patients with inactive LN and without renal involvement (both $p<0.001$), however, there was no difference between latter groups. Urinary heparanase levels positively correlated with proteinuria (measured by spot urine protein/creatinine ratio) and renal SLEDAI ($\gamma=0.514$, $p<0.001$ and $\gamma=0.365$, $p=0.004$, respectively), but inversely with serum C3 ($\gamma=-0.432$, $p<0.001$), C4 ($\gamma=-0.279$, $p=0.013$), and CH50 levels ($\gamma=-0.336$, $p=0.003$). In 39 patients with active LN whose samples were obtained at the time of kidney biopsy, urinary heparanase levels showed positive correlation with activity index ($\gamma=0.409$, $p=0.011$), but not with chronicity index ($p>0.05$). A cut-off value of 444 mU/mg predicted presence of active LN with sensitivity of 74.5% and specificity of 67.1%.

Conclusions Urinary heparanase levels are increased in patients with active LN and reflect the activity of nephritis, indicating that urinary heparanase can serve as useful biomarker for active LN.

207

SUBCLINICAL DETERIORATION OF LEFT VENTRICULAR DIASTOLIC FUNCTION IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background and aims Systemic lupus erythematosus (SLE) represents diverse cardiac manifestation, but diastolic dysfunction has been reported infrequently. This study is aimed to