1.3, CNS involvement, vasculitis and fever>38 °C were of statistically significance P value: <0.001,0.02,0.03 and 0.03 respectively.

Conclusion In this multicenter cohort series with DAH in LN patients CNS involvement, vasculitis and fever>38 °C were associated in the occurrence of DAH. Mortality was low in our cohort in comparison to previous series which may be explained by early diagnosis and use of aggressive management.

PO.5.113 C3 AND C1Q DEPOSITION IN DIFFERENT KIDNEY COMPARTMENTS IS NOT ASSOCIATED WITH SERIOUS INFECTIONS IN LUPUS NEPHRITIS

[1]T Knezevic, [2]I Padjen*, [3]V Ivkovic, [4]M Laganovic, [5]I Jezic, [6]Z Biloglav, [7]S Bulimbasic, [7]M Coric, [1]M Mayer, [1]B Anic. *[1]University Hospital Centre Zagreb, Division of Nephrology, Hypertension, Dialysis and Transplantation, Department of Internal Medicine ~ Zagreb ~ Croatia; [2]Division of Clinical Immunology and Rheumatology, Department of Internal Medicine, University of Zagreb, School of Medicine ~ Zagreb ~ Croatia; [3]University Hospital Centre Zagreb, Division of Nephrology, Hypertension, Dialysis and Transplantation, Department of Internal Medicine, Zagreb, Croatia; University of Rijeka, Faculty of Health Studies, Rijeka ~ Zagreb ~ Croatia; [4]Renal Division, Department of Medicine, Clinical Hospital Merkur, Zagreb, Croatia, University of Zagreb, School of Medicine ~ Zagreb ~ Croatia; [5]Division of Clinical Immunology and Rheumatology, Department of Internal Medicine ~ Zagreb ~ Croatia; [6]Andrija Štampar School of Public Health, Zagreb, Croatia, University of Zagreb, School of Medicine ~ Zagreb ~ Croatia; [7]Department of Pathology and Cytology, University Hospital Centre Zagreb, Croatia, University of Zagreb, School of Medicine ~ Zagreb ~ Croatia*

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Purpose Complement activation is an important step in the mechanism of tissue damage in lupus nephritis (LN). Complement deposition in kidney tissue might reflect different immunologic processes and higher disease severity and result in adverse outcomes, but very few studies explored these potentially important associations. Given these immunologic consequences, we have postulated that complement deposition in the kidney might be associated with higher risk for serious infections in LN.

Methods We have conducted a retrospective cohort study to evaluate the prognostic significance of C1q and C3 complement factors in renal tissue compartments for the occurrence of serious infections. We have collected data on demographics, clinical and laboratory parameters and histopathology (light, immunofluorescent and electron microscopy) at the time of biopsy and after long-term follow-up. Serious infections were defined as those that: 1. require intravenous therapy OR 2. lead to hospitalization OR 3. have resulted in death in 30 days from diagnosis. C1q and C3 expression graded in different kidney compartments (mesangium, glomerular basement membrane (GBM), tubular basement membrane (TBM) and peripheral capillary wall) as 0 to 3+ and another analysis was performed with dichotomized grading as 0 (absent) and 1+ to 3+ (present). SLE was diagnosed using the American College of Rheumatology criteria.

Results A total of 51 patients with biopsy-proven LN were followed up for 4.5±2.9 years (80% women, mean age at biopsy 38±14). Of these, 22 (43%) had at least one episode of serious infection with 4 patients having 2 episodes. Complement expression in different kidney compartments was as follows: mesangium (C1q 54%, C3 59%), GBM (C1q 34%, C3 41%), TBM (C1q 5%, C3 5%) and blood vessel wall (C1q 0%, C3 5%). There was no difference in the distributions of mesangial (present vs. absent, 80% vs. 78%, p>0.99), GBM (53% vs. 38%, p=0.53), TBM (20% vs. 5%, p=0.17) and peripheral capillary wall C3 deposition (25% vs. 35%, p=0.53) or mesangial (75% vs. 65%, p=0.53), GBM (47% vs. 33%, p=0.52), TBM (5% vs. 5%, p>0.99) and peripheral capillary wall C1q deposition (25% vs. 30%, p=0.75).

Conclusions Complement deposition in kidney tissue, while an underexplored and potentially important process, was not associated with serious infections in LN.

PO.5.114 ONLINE EDUCATION SIGNIFICANTLY IMPROVED RHEUMATOLOGISTS' KNOWLEDGE OF THE BURDEN OF LUPUS NEPHRITIS AND APPROPRIATE TREATMENT STRATEGIES FOR PATIENTS

[1]E Bell*, [1]M Calle, [2]L Lightstone. *[1]Medscape Education Global ~ London ~ UK; [2]Imperial Lupus Centre, Imperial College London, Hammersmith Hospital ~ London ~ UK*

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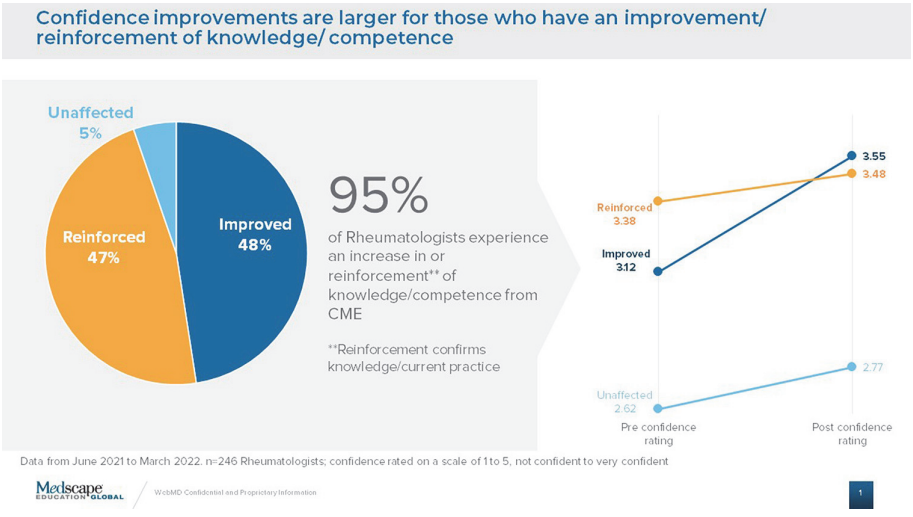
Background/purpose Lupus nephritis (LN) is the most common severe manifestation of SLE and can progress to end stage



Abstract PO.5.114 Figure 1

kidney disease within 15 years of diagnosis in up to 25% of patients. It is important that rheumatologists understand the pathogenesis of LN, the substantial burden of this condition and best practice in improving long-term outcomes for patients using appropriate treatment strategies.

Methods Rheumatologists participated in an online video activity entitled "An Update on Lupus Nephritis' (launched 03 June 2021, data collection by March 2022). Educational effect was assessed using a repeated-pair design, pre-/post-assessment. A paired samples t-test was conducted for significance testing on overall average number of correct responses and for confidence rating. Cohen's d with correction for paired samples estimated the effect size of the education on number of correct responses (<0.20 modest, .20-.49 small, .59-.79 moderate, ≥.80 large). A series of McNemar's tests were conducted at the question level (5% significance level, P <0.05).

Results • Rheumatologists (n=246) significantly improved their knowledge of the burden of LN (P <0.001), and treatment strategies for LN (P <0.05)

• Rheumatologists had a high baseline level of knowledge regarding the role of kidney biopsy in SLE patients showing signs of kidney involvement

• The average percentage of questions answered correctly increased by 32% (P <0.001)

• 98% reported that the education will improve their performance, resulting in improved patient outcomes

• Post-activity, 28% of rhematologists reported increased confidence in managing patients with SLE and LN

• Overall, 95% of rheumatologists experienced an increase or reinforcement of knowledge (pie chart); confidence improvements were larger for those who had an improvement/reinforcement of knowledge (right hand graph) compared with those who were unaffected

Conclusions Participation in this online activity significantly improved rheumatologists' understanding of LN in patients with SLE. These results suggest that further education on LN would be beneficial for rheumatologists to embed knowledge of LN, increase awareness of screening for LN, and minimize the potential long-term consequences of LN for patients.

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PO.5.115 SYSTEMIC LUPUS ERYTHEMATOSUS (SLE): PATIENTS WITH AND WITHOUT RENAL INVOLVEMENT: A REAL WORLD ANALYSIS SHOWING DEMOGRAPHIC, CLINICAL AND TREATMENT DIFFERENCES ACROSS MORE THAN 1,279 EU5 PATIENTS

M Yarnall, R Rex*, P Pouliot. *Spherix Global Insights ~ Exton ~ USA*

10.1136/lupus-2022-elm2022.137

Purpose Systemic lupus erythematosus (SLE) patients present significant challenges in management. This study was to evaluate moderate to severely active SLE patients and determine overlapping characteristics and significant differences among this cohort of SLE patients with and without renal involvement.

Methods 1,279 moderate and severe SLE patient records were collected in collaboration with 289 EU5 rheumatologists via an online survey platform from November 12, 2021, through January 28, 2022. Patients were at least 18 years old with diagnosed SLE and treated with at least one prescription agent.

Results While women make up the majority of SLE patients overall, males are over-represented among those with renal involvement. Other significant differences exist in disease manifestations:

Physicians more often consider their SLE patients with renal involvement as 'severe' and to have 'high disease activity'. Treatments are often different between the two patient types:

Conclusions SLE patients with renal manifestations often have multiple other manifestations of their disease and more diagnosed comorbidities, adding significant complexity to their treatment and care regimens.

DISCLOSURE Maxine Yarnall, Philippe Pouliot, and Ryan Rex are employees of Spherix Global Insights, an independent market intelligence firm, and have received no industry funding and report on this study.

Abstract PO.5.115 Table 1

Current SLE Manifestations at Most Recent Visit	Patients with no renal involvement (n=727)	Patients with renal involvement (n=552)
Musculoskeletal involvement	78%	90%
Dermatologic involvement	51%	81%
Pulmonary involvement	20%	50%
Gastrointestinal involvement	19%	47%
CNS involvement	14%	41%
Cardiovascular involvement	12%	49%
Ocular involvement	16%	45%

Treatments	Patients with no renal involvement (n=727)	Patients with renal involvement (n=552)
Hydroxychloroquine	59%	47%
ACEi	15%	33%
Oral steroids	35%	42%
MMF	11%	19%
Benlysta	19%	25%
Rituximab	6%	13%
SGLT2 inhibitors	3%	8%
Calcineurin inhibitors	2%	5%