

we used FRAX to estimate the 10-year major osteoporotic fracture risk based solely on age, sex, and BMI for each patient.

Results: Mean age was 53.6±13.9 years. Fifteen (14.2%) patients had previous vertebral fractures and 36 (34.0%) had sustained previous non-vertebral fractures. Twenty patients (18.9%) were treated with anti-osteoporosis medications (9, 8.5% with oral bisphosphonates; 5, 4.7% with zoledronic acid and 6, 5.7% with denosumab). BMD measurements were significantly lower with REMS when compared with DXA across all skeletal sites (all p<0.001). The Cohen's k for osteoporosis diagnosis between REMS T-score and DXA T-score was 0.229 (95% CI -0.028, 0.486) at the LS, 0.301 (95% CI 0.044, 0.558) at FN and 0.311 (95% CI 0.083, 0.539) at any site, representing a slight to fair agreement between the two methods. In the GC-treated group, similar results were found (table 1). REMS showed mild to moderate correlation with DXA (p<0.05) and demonstrated 45% sensitivity and 88.4% specificity for diagnosing osteoporosis. ROC curves in all patients demonstrated that REMS exhibited similar discriminative ability compared to DXA across all skeletal sites evaluated (Figure 1). When the clinical predictor model based on age, sex, and BMI was included, its standalone AUC was 0.735 (95% CI 0.582-0.889) at the FN and 0.729 (95% CI 0.574-0.884) at the LS, comparable to REMS and DXA. In a linear regression model, REMS BMD values were more strongly associated with age, sex, and body mass index: r² values for REMS LS (r²=0.569), FN (r²=0.696), and TH (r²=0.744), compared to the corresponding r² values for DXA (0.208, 0.489, and 0.429, respectively).

Conclusions: In conclusion, we found only a fair to moderate agreement between REMS and DXA in osteoporosis classification and both methods had a low ability to discriminate fracture risk across skeletal sites. REMS and DXA showed a fair to moderate agreement in osteoporosis diagnosis and in fracture discrimination in SLE patients. REMS measurements showed stronger associations with age, sex, and BMI than DXA.

Table 1. Association and agreement between radiofrequency echographic multispectrometry (REMS) and dual x-ray absorptiometry (DXA) in the overall SLE population and glucocorticoid (GC) treated group; * represents p<0.05

Anatomical site	GC treated (n=44)			All patients (n=106)			
	Lumbar Spine	Femoral Neck	Total Hip	Lumbar Spine	Femoral Neck	Total Hip	
Valid cases (n)	34	35	34	79	82	78	
Sensitivity ^a (%)	33.3	60.0	0.0	33.3	45.5	40.0	
Specificity ^a (%)	91.4	94.9	94.6	90.4	89.5	96.6	
k	0.239	0.549*	-0.036	0.229	0.301*	0.366	
r	0.40*	0.41*	0.50*	0.54*	0.50*	0.61*	
r ²	0.16*	0.17*	0.25*	0.29*	0.25*	0.37*	
Regression line slope	0.40	0.39	0.44	0.42	0.34	0.65	
SEE (g/cm ³)	0.190	0.127	0.132	0.157	0.118	0.109	
Average differences (mean±1.96 SD, g/cm ³)	0.171±0.211	-0.128±0.165	-0.066±0.152	-0.197±0.192	-0.146±0.136	-0.078±0.165	
Diagnostic Classification, n (%)	All sites			All sites			
	Normal	Osteopenia	Osteoporosis	Normal	Osteopenia	Osteoporosis	
	REMS	18 (40.9)	20 (45.5)	6 (13.6)	39 (36.8)	48 (45.3)	19 (17.9)
	DXA	14 (31.8)	16 (36.3)	12 (27.3)	36 (34.0)	50 (47.2)	20 (18.9)
	REMS	18 (40.9)	20 (45.5)	6 (13.6)	39 (36.8)	48 (45.3)	19 (17.9)

^afor classification of osteoporosis REMS vs DXA T-scores

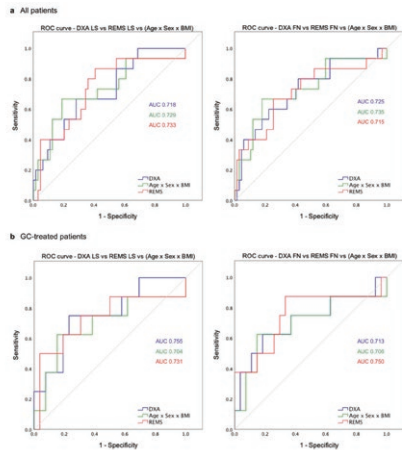


Figure 1. Receiver operator characteristic (ROC) curves comparing the diagnostic performance of dual x-ray absorptiometry (DXA) and radiofrequency echographic multispectrometry (REMS) and the clinical predictor model (age x sex x body mass index) in identifying morphometric vertebral fractures in all patients (a) and in glucocorticoid (GC) treated patients (b)

REFERENCES: NIL.

Acknowledgments: NIL.

Disclosure of Interests: Mariana Diz Lopes: None declared, Giovanni Orsolini: None declared, Isotta Galvagni: None declared, Denise Rotta: None declared, Carmela Dartizio: None declared, Camilla Benini: None declared, Angelo Fassio

Abiogen, Novartis, Neopharmed, Davide Gatti Accord Health Care, Abiogen, Amgen, Eli-Lilly, Mereo, Neopharmed-Gentili, UCB, Ombretta Viapiana Gilead, Fresenius Kabi, Biogen, Eli-Lilly, UCB, Abbvie, MSD, BMS., Maurizio Rossini AbbVie, ItalFarmaco, Neopharmed-Gentili, Eli-Lilly, Theramex, UCB, Giovanni Adami Theramex, UCB, Lilly, Galapagos, Fresenius Kabi, Amgen, BMS, Abiogen and Pfizer.

DOI: 10.1136/annrheumdis-2026-eular.B.1848

AB1089

NEUROPSYCHIATRIC SYSTEMIC LUPUS ERYTHEMATOSUS CLINICAL FEATURES AND ORGAN DAMAGE IN A SINGLE RHEUMATOLOGY CENTER IN MALAYSIA

Keywords: Epidemiology, Descriptive Studies

S. A. Wan Mohamad Akbar¹, Y. K. Cheong¹, W. Lee Wan Hui¹, C. Kueh¹, A. T. Jobli², C. L. Teh¹. ¹Sarawak General Hospital, Rheumatology, Kuching, Malaysia, ²University Malaysia Sarawak, Radiology, Kota Samarahan, Malaysia

Background: Neuropsychiatric systemic lupus erythematosus (NPSLE) poses a significant challenge in diagnosis and management, and is associated with increased morbidity and mortality, despite advances in systemic lupus erythematosus (SLE) management.

Objectives: We aimed to examine the prevalence, clinical features, and the organ damage of NPSLE patients in our SLE cohort.

Methods: We collected demographics and clinical data in this prospective observational study from July 2018 until November 2025. All patients fulfilled the 2012 Systemic Lupus Collaborating Clinics (SLICC) Classification Criteria for SLE. NPSLE cases were defined according to the 1999 ACR nomenclature and case definitions for NPSLE. Statistical analysis used independent sample T-test for continuous data and Chi-Square or Fisher's exact test for categorical data. A p-value<0.05 is considered significant.

Results: There were 748 SLE patients in this cohort, with 663 (88.6%) women and 85 (11.4%) men. The mean age at diagnosis was 31.14 ±13.85 years. There were 377 (50.4%) patients with lupus nephritis. There were 71 (9.5%) patients with neuropsychiatric lupus (NPSLE) manifestations. The majority of NPSLE patients had seizures (n=32,45.1%), followed by cerebrovascular disease (n=9,12.7%), acute confusional state (n=6,8.5%), myelopathy (n=4,5.6%), and mixed presentation (n=4,5.6%). Other NPSLE presentations were aseptic meningitis (n=3,4.2%), psychosis (n=3,4.2%), mononeuropathy (n=3,4.2%), cranial neuropathy (n=3,4.2%), polyneuropathy (n=2,2.8%), cognitive dysfunction (n=1,1.4%) and mood disorder (n=1,1.4%). In this NPSLE cohort, 45 (63.4%) patients were positive for anti-dsDNA, 11 (15.5%) were positive for antiphospholipid antibodies, and 8 (11.3%) were positive for anti-Ribosomal P protein. More patients in the NPSLE group had severe disease at first presentation compared to the non-NPSLE group (51(71.8%) vs 293(43.3%), p<0.001). A higher proportion of patients in the NPSLE group had a SLE Damage Index score >1 compared with the non-NPSLE group (26(36.6%) vs 103(15.2%), p<0.001). The mean SLE Damage Index score was also higher in the NPSLE group (1.38±1.52 vs 0.61±1.10, p<0.001). Certain SLE Damage Index score items were also significantly higher in the NPSLE group as compared to the non-NPSLE group. The items were retinal change (3(4.2%) vs 6(0.89%), p=0.05), seizures (13(18.3%) vs 5(0.74%), p<0.001), stroke (14(19.7%) vs 21(3.1%),p<0.001), cranial or peripheral neuropathy (3(4.2%) vs 2(0.3%), p=0.007), osteoporosis (6(8.5%) vs 22(3.2%), p=0.04), and chronic scarring alopecia (5(7.04%) vs 9(1.33%), p=0.007). There were more deaths in the NPSLE group compared with the non-NPSLE group (23.9% vs 11.8%, p=0.008).

Conclusions: The most common NPSLE manifestation was seizure. Although not as prevalent as lupus nephritis, NPSLE still carried significant morbidity and mortality, with NPSLE associated with severe SLE manifestation at diagnosis, neurology organ damage items and death.

Table 1. Clinical features of NPSLE cohort

Clinical features	Patients,n(%)
Gender	
Women	63(88.7)
Men	8(11.3)
Clinical manifestations	
Aseptic meningitis	3(4.2)
Acute confusional state	6(8.5)
Cerebrovascular disease	9(12.7)
Cognitive dysfunction	1(1.4)
Mood disorder	1(1.4)
Myelopathy	4(5.6)
Psychosis	3(4.2)
Seizures	32(45.1)
Cranial neuropathy	3(4.2)
Mononeuropathy	3(4.2)

Clinical features	Patients,n(%)
Polyneuropathy	2(2.8)
Anxiety disorder	0
Demyelinating syndrome	0
Headache	0
Movement disorder	0
Acute inflammatory demyelinating polyradiculoneuropathy	0
Autonomic disorders	0
Myasthenia gravis	0
Plexopathy	0
Mixed manifestations	4(5.6)
Autoantibodies	
Antids-DNA	45(63.4)
Antiphospholipid syndrome	11(15.5)
Anti-Ribosomal antibodies	8(11.3)

Table 2. Differences in clinical features between NPSLE and non-NPSLE group

Clinical features	NPSLE group, n=71(%)	Non NPSLE group,n=677 (%)	p
Gender			
Women	63(88.7)	600(88.6)	0.98
Men	8(11.3)	77(11.4)	
Severe SLE at presentation			
Present	51(71.8)	293(43.3)	<0.001
Absent	20(28.2)	384(56.7)	
Antiphospholipid syndrome			
Present	9(12.7)	59(8.7)	0.28
Absent	62(87.3)	618(91.3)	
SLE Damage Index			
SDI≤1	45 (63.4%)	574 (84.8%)	<0.001
SDI>1	26(36.6%)	103(15.2%)	
Mean SLE Damage Index Score	1.38±1.515	0.61±1.104	<0.001
SLE Damage Score Items			
Cognitive impairment	2(2.8)	0	0.009
Seizure	13(18.3)	5(0.74)	<0.001
Cerebrovascular accident	14(19.7)	21(3.1)	<0.001
Cranial or Peripheral Neuropathy	3(4.2)	2(0.3)	0.007
Osteoporosis	6(8.5)	22(3.2)	0.04
Chronic scarring alopecia	5(7.04)	9(1.33)	0.007
Retinal change	3(4.2)	6(0.89)	0.05
Cataract	7(9.9)	62(9.2)	0.87
Transverse myelitis	1(1.4)	0	0.095
Glomerular filtration rate(GFR)<50%	7(9.9)	36(5.3)	0.17
Proteinuria >3.5g/24 hours	1(1.4)	6(0.89)	0.5
End stage renal failure (ESRF)	3(4.2)	27(4)	0.76
Pulmonary arterial hypertension	1(1.4)	6(0.89)	0.5
Pulmonary fibrosis	1(1.4)	17(2.5)	1
Shrinking lung	0	0	N/A
Pleural fibrosis	0	1(0.15)	1
Pleural infarction	0	0	N/A
Angina or coronary artery bypass	0	3(0.44)	1
Myocardial infarction	0	5(0.73)	1
Cardiomyopathy	1(1.4)	4(0.59)	0.39
Valvular disease	2(2.8)	6(0.89)	0.17
Pericarditis or pericardiectomy	0	0	N/A
Claudication	0	0	N/A
Minor tissue loss	1(1.4)	2(0.3)	0.26
Significant tissue loss	1(1.4)	1(0.15)	0.18
Venous thrombosis with swelling, ulceration or venous stasis	4(5.6)	17(2.5)	0.13
Gastrointestinal infarction or resection of bowel	1(1.4)	3(0.44)	0.33
Mesenteric insufficiency	0	0	N/A
Chronic peritonitis	0	0	N/A
Stricture or upper gastrointestinal tract surgery	0	0	N/A
Pancreatic insufficiency	0	1(0.15)	1
Muscle atrophy or weakness	0	0	N/A
Deforming arthritis	0	12(1.77)	0.62
Avascular necrosis	3(4.2)	10(1.48)	0.06
Osteomyelitis	0	0	N/A
Extensive skin scarring or panniculom	1(1.4)	7(1.03)	0.55
Skin ulceration>6 months	0	4(0.59)	1
Premature gonadal failure	5(7.04)	20(2.95)	0.79
Diabetes	0	28(4.14)	0.1
Malignancy	4(5.63)	17(2.51)	0.13
Outcome			
Alive	54(76.1%)	597(88.1%)	0.008
Dead	17(23.9%)	80(11.8%)	

REFERENCES: NIL.

Acknowledgments: We would like to thank the Director-General of the Ministry of Health Malaysia for his permission to publish this abstract.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2026-eular.B.656

AB1090 UNCOMMON AND RARE CLINICAL MANIFESTATIONS IN SYSTEMIC LUPUS ERYTHEMATOSUS: RESULTS FROM A POPULATION-BASED COHORT

Keywords: Autoimmunity, Outcome measures, Comorbidities

M. Cubells Ferrer¹, A. Fabregat Escañuela¹, L. De Daniel¹, N. Adell i Manén¹, B. Alonso Palao¹, P. Vidal-Montal¹, F. J. Narváez García¹. ¹Hospital Universitari de Bellvitge, Rheumatology, Barcelona, Spain

Background: Systemic lupus erythematosus (SLE) is a complex, heterogeneous systemic autoimmune disease characterised by a broad clinical spectrum and a variable course over time, with some manifestations being rarely observed.

Objectives: This study aimed to assess the frequency and clinical presentation of rare manifestations.

Methods: This was a retrospective, cross-sectional study in a population-based cohort of 533 adult patients with SLE diagnosed between 1980 and 2025 at a tertiary university hospital and registered in a specifically designed database (AQUILES registry). All patients fulfilled the 1997 revised American College of Rheumatology classification criteria for SLE. Whenever applicable, definitions of clinical manifestations and organ/system involvement followed standardized criteria routinely used in SLE research and clinical practice. Prevalence estimates and their 95% confidence intervals (CIs) were calculated assuming a Poisson distribution.

Results: Of the 533 patients, 457 (85.7%) were women, with a mean age at SLE diagnosis of 36 ± 15 years and a median follow-up of 184 months (IQR 25–75: 98–301). Rare or uncommon clinical manifestations were observed in 210 of 533 patients (prevalence 39.4%; 95% CI 34.3–45.1); among them, 75 patients (14.1%; 95% CI 11.1–17.6) presented two or more manifestations. These included:

- (1) *Osteoarticular manifestations* (Jaccoud arthropathy, myositis, or osteonecrosis), prevalence 9.6% (n = 51; 95% CI 7.1–12.6).
- (2) *Cutaneous manifestations* (lupus panniculitis, cutaneous vasculitis, urticarial vasculitis, bullous lupus, and chondritis), prevalence 8.8% (n = 47; 95% CI 6.5–11.7).
- (3) *Gastrointestinal manifestations* (lupus enteritis, intestinal pseudo-obstruction, protein-losing enteropathy, lupus pancreatitis, and mesenteric panniculitis), prevalence 1.9% (n = 10; 95% CI 0.9–3.5).
- (4) *Liver involvement* (lupus hepatitis and autoimmune hepatitis), prevalence 1.3% (n = 7; 95% CI 0.5–2.7).
- (5) *Pulmonary manifestations* (lupus pneumonitis, shrinking lung syndrome, and interstitial lung disease), prevalence 6.6% (n = 35; 95% CI 4.6–9.1).
- (6) *Ocular manifestations* (lupus retinopathy, episcleritis/scleritis, and anterior uveitis), prevalence 2.1% (n = 11; 95% CI 1.0–3.7).
- (7) *Cardiac and cardiovascular manifestations* (Libman–Sacks endocarditis, pulmonary arterial hypertension, and lupus myocarditis), prevalence 5.6% (n = 30; 95% CI 3.8–8.0).
- (8) *Neurological manifestations*, including focal CNS involvement (myelitis, chorea, and seizures), prevalence 6.6% (n = 35; 95% CI 4.6–9.1), diffuse CNS manifestations (organic brain syndrome, lupus psychosis, and lupus meningitis), prevalence 3.2% (n = 17; 95% CI 1.9–5.1), and peripheral nervous system involvement (demyelinating neuropathy, lupus polyneuropathy, and mononeuritis multiplex), prevalence 3.2% (n = 17; 95% CI 1.9–5.1).
- (9) *Non-nephritic lupus renal involvement* (podocytopathy, pauci-immune necrotizing glomerulonephritis, and fibrillary glomerulonephritis), prevalence 1.3% (n = 7; 95% CI 0.5–2.7).
- (10) *Hematological manifestations* (macrophage activation syndrome, aplastic anemia, autoimmune pure red cell aplasia, thrombotic microangiopathy, reactive lymphadenitis, and Kikuchi disease), prevalence 7.1% (n = 38; 95% CI 5.0–9.8).
- (11) *Systemic vasculitis*, prevalence 1.9% (n = 10; 95% CI 0.9–3.5).

Conclusions: A considerable proportion of patients with SLE (39.4%) develop rare or uncommon complications, some of which may be potentially life-threatening and are frequently absent from clinical trials and guidelines, representing a major challenge for clinicians.

REFERENCES: NIL.

Acknowledgments: NIL.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2026-eular.B.2454