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Clinical and immunological characteristics of a single-centre cohort of mild systemic lupus erythematosus

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Background

The improved **early recognition and treatment** of systemic lupus erythematosus (SLE) allowed the **increase of patients with mild disease**. The phenotype of mild SLE has not been fully characterized.

Objective

To characterise a cohort of mild SLE patients.

Methods

The clinical information of adult patients with mild SLE referring to our centre from January to December 2021 were retrospectively collected and evaluated. Mild SLE was defined as the **occurrence of low disease activity** (LDA) **or remission for at least 24 months** according to SLEDAI-2k and/or SLEDAS scores, **using only hydroxychloroquine and/or prednisolone (up to 5 mg/day)**.

Results

81/240 (**33.8%**) SLE patients were included, **93.8% females**, with a median (interquartile range) age of 54.0 (44.0-67.0) years at last follow-up and **35.0** (23.5-48.5) **years at diagnosis**. 81.3% and 75.3% of patients met the SLICC and the 2019 EULAR/ACR SLE classification criteria, respectively (Figure 1).

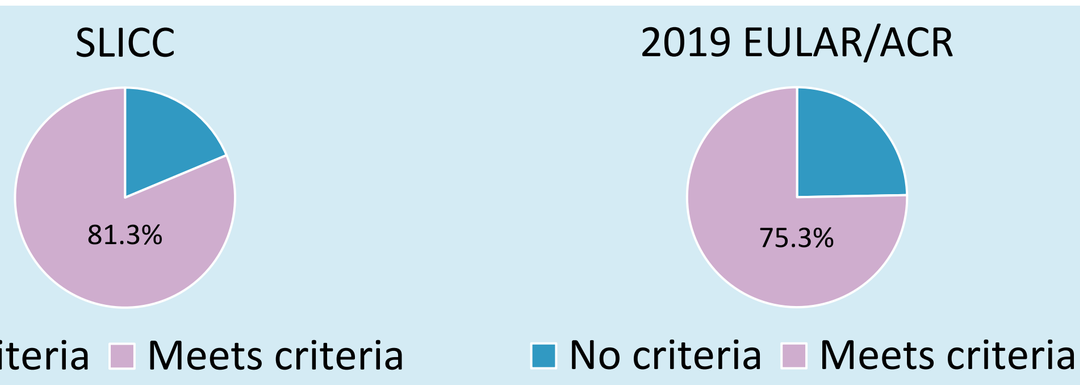

Figure 1 | Proportion of patients in the cohort satisfying the SLICC and the 2019 EULAR/ACR SLE classification criteria.

Maximum SLEDAI-2k and SLEDAS score were 7 (5.0-8.0) and 8.00 (5.59 - 11.72), respectively, generally recorded at disease onset. According to SLEDAI-2k and SLEDAS definitions, 45.0% and 95.0% of the patients were in remission, and 55.0% and 5.0% in LDA at last follow-up, respectively (Figure 2).

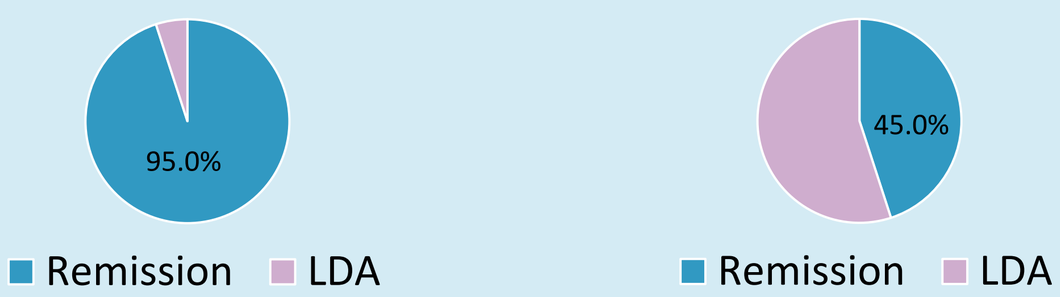

Figure 2 | Proportion of patients in the cohort in remission and LDA according to SLEDAS and SLEDAI-2k definitions.

All patients were ANA positive (100%), and the anti-Ro were the most common antibodies (49.4%), followed by the anti-dsDNA (28.4%).
Included patients most commonly had a history of cutaneous lupus (74.1%), inflammatory arthralgia (71.6%), or arthritis (44.4%). Also, severe manifestations such as **lupus nephritis** (13.6%) and **central nervous system involvement** (CNS, 4.9%) were present (Table 1).
Previous treatments included **cyclophosphamide** (11.7%), **mycophenolate mofetil** (6.5%), and **rituximab** (2.5%, Table 2).

Table 1 – Clinical manifestations of the 81 patients included in the mild SLE cohort

Cutaneous lupus	
Ever (%)	60 (**74.1**)
Current (%)	1 (1.2)
Arthritis	
Ever (%)	36 (**44.4**)
Current (%)	0 (0)
Oral afthae	
Ever (%)	30 (**37**)
Current (%)	4 (4.9)
Lupus nephritis	
Total (%)	11 (**13.6**)
Class II (% of the subset)	1 (9)
Class III+V (% of the subset)	1 (9)
Class IV (% of the subset)	3 (27.5)
Class V (% of the subset)	4 (36.5)
No kidney biopsy (% of the subset)	2 (18)
Pericarditis	
Ever (%)	8 (**9.9**)
Current (%)	0
Pleuritis	
Ever (%)	4 (4.9)
Current (%)	0 (0)
Central nervous system involvement	
Total (%)	4 (4.9)
Stroke (%)	1 (1.2)
Seizure (%)	2 (2.5)
Not characterised (%)	1 (1.2)

Table 2 – Previous and current treatments used by patients in the mild SLE cohort

Drug	Ever	Current
Hydroxychloroquine, N (%)	81 (100)	81 (100)
Prednisolone, N (%)	60 (75.9)	28 (35.4)
Methotrexate, N (%)	10 (13.0)	0 (0)
Cyclophosphamide, N (%)	9 (11.7)	0 (0)
Azathioprine, N (%)	8 (9.9)	0 (0)
Mycophenolate mofetil, N (%)	5 (6.5)	0 (0)
Cyclosporine, N (%)	2 (2.6)	0 (0)
Rituximab, N (%)	2 (2.5)	0 (0)
Intravenous immunoglobulin, N (%)	2 (2.5)	0 (0)

Discussion

Mild SLE is phenotypically characterised by the **common occurrence of joint and skin involvement**, but it is **also achievable in patients** with previous kidney or CNS involvement and **previously highly immunosuppressed**.

References

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