

Comparison of lupus patients with early and late onset nephritis: a study in 71 patients from a single referral center

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Background:

It is important to know the characteristics of SLE renal manifestations as it helps prompt recognition and treatment. The aim of this study was to compare clinical, serological and treatment data of nephritis of early and late onset.

Methods:

Retrospective study of 71 SLE patients with biopsy proven nephritis divided in early nephritis group (diagnosis in the first 5 years of the disease) and late nephritis (diagnosis of nephritis after 5 years). Epidemiological, serological, clinical and treatment data were collected from charts.

Results:

In this sample, 71.4% had early and 29.5% had late onset nephritis. Clinical, serological and treatment comparison is on table 1. Table 2 shows the treatment response in both groups.

Conclusions:

Most of SLE patients had nephritis in the first five years of disease. No major differences were noted when disease profile or treatment outcome of early and late onset nephritis were compared.

Table 1- Comparative analysis of clinical and serological data in 71 patients with Systemic Lupus Erythematosus (SLE) with early and late onset nephritis.

	Total sample N=71	Early nephritis N=50 (70.4%)	Late nephritis N=21 (29.5%)	P (*)
Ethnic background (**)	Caucasians 27 Afrodescendants 44	Caucasians 16 Afrodescendants 34	Caucasians 11 Afrodescendants 10	0.64
Median age at SLE diagnosis (years) (IQR)	26.0 (21.0-38.0)	27 (21-40.2)	26 (21.0-37.0)	0.67
Median age at nephritis diagnosis (years) (IQR)	30.0 (23.0-42.0)	27.5 (21.7-41.0)	35 (29.5-43.5)	0.01
Female gender	62 (87.3%)	43 (84.3%)	19 (90.4%)	0.71
Tobacco exposure	8 (11.2%)	4 (9%)	4 (19.0%)	0.22
Malar rash	30 (42.2%)	20 (40%)	10 (47.6%)	0.55
Discoid lesions	2 (2.8%)	0	2 (9.5%)	0.08
Photossensitivity	48 (67.6%)	32 (64%)	16 (76.1%)	0.72
Oral ulcers	35 (49.2%)	24 (48%)	11 (52.3%)	0.73
Articular involvement	60 (84.5%)	40 (80%)	20 (95.2%)	0.15
Serositis	18 (25.3%)	15 (30%)	3 (14.2%)	0.23
Psychosis	1 (1.4%)	0	1 (4.7%)	0.29
Convulsions	6 (8.4%)	6 (12%)	0	0.16
Hemolytic anemia	8 (11.4%)	7 (14.2%)	1 (4.7%)	0.42
Leukopenia	25 (35.2%)	15 (30%)	10 (47.6%)	0.15
Lymphocytopenia	15 (21.1%)	11 (22%)	4 (19.0%)	1.00
Thrombocytopenia	2 (2.8%)	1 (2%)	1 (4.7%)	0.50
Anti-Ro (SS-A)	26 (36.6%)	19 (38%)	7 (33.3%)	0.70
Anti-La (SS-B)	10 (14.0%)	7 (14%)	3 (14.2%)	1.00
Anti-RNP	13 (18.3%)	7 (14%)	6 (28.5%)	0.14
Anti-Sm	13 (18.3%)	8 (16%)	5 (23.8%)	0.50
Positive Coombs	6 (8.4%)	5 (10%)	1 (4.7%)	0.66
Rheumatoid factor	6 (8.4%)	6 (12%)	0	0.16
Anticardiolipin IgG	1 (1.4%)	1 (2%)	0	1.00
Anticardiolipin IgM	2 (2.8%)	2 (4%)	0	1.00
Lupus anticoagulante	5 (7.0%)	3 (6%)	2 (9.5%)	0.62
Antiphosp.Antib. Synd.	5 (7.0%)	3 (6%)	2 (9.5%)	0.62

(*) refers to early onset versus late onset; (**) - auto declared; IQR= interquartile range; n= number.

References:

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TABLE 2- Main characteristics and treatment response in systemic Lupus Erythematosus (SLE) patients with early and late onset nephritis.

		Early onset N=50	Late onset N=21	p
Glomerulonephritis classification	Class II	5/50	3/21	0.79
	Class III	10/50	3/21	
	Class III+ V	2/50	0	
	Class IV	25/50	13/21	
	Class IV+ V	1/50	0	
	Class V	7/50	2/21	
Induction	cyclophosphamide	44/50	20/21	0.66
	MMF	6/50	1/21	
Maintenance	azathioprine	31/50	14/21	0.70
	MMF	18/50	6/21	
Treatment response 1 year	Total remission	24/50	7/21	0.50
	Partial remission	16/50	8/21	
	Treatment failure	10/50	6/21	
Treatment response 2 years	Total remission	30/50	12/21	0.35
	Partial remission	10/50	2/21	
	Treatment failure	10/50	7/21	
Median creatinine (IQR) mg/dL	Initial	0.98 (0.69-1.35)	0.97 (0.77-1.32)	0.94
	After 2 years	0.80 (0.7-1.11)	.74 (0.60-1.05)	0.45
Creatinine clearance mL/min	Initial (median;IQR)	83.5 (52.3-120.6)	82.3 (52.7-89.0)	0.60
	After 2 years (mean ±SD)	94.7±38.7	97.07±37.8	0.81
Positive anti dns (n)	initial	20/50 (40%)	13/21 (61.9%)	0.09
	After 2 years	14/50 (28%)	9/21 (42.8%)	0.22
Median 24h proteinuria (g/L)	inicial	2.9 (1.73-5.4)	2.03 (1.22-5.1)	0.17
	After 2 years	0.36 (0.14-1.15)	0.35 (0.18-1.02)	0.48
C3 (mg/dL)	Initial (median;IQR)	72.5 (46.5-99.6)	85.7 (56.4-104.5)	0.22
	After 2 years (mean;SD)	109.4±29.4	103.3±36.3	0.45
Median C4 (IQR) mg/dL	Initial	11.9 (7.9-21.8)	12.0 (7.0-23.2)	0.93
	After 2 years	19.0 (13.9-26.9)	23.0 (13.7-28.5)	0.68
Hemoglobine	Initial (mean±SD)	11.64±2.22	12.8±1.56	0.02
	After 2 years (median; IQR)	13.0 (12.0-14.1)	12.6 (12.0-13.8)	0.58
Recidiva (n)	-	29/50 – 58%	12/21 – 57.1%	0.94
Relapse time (years) median (IQR)	-	4.5 (2.2-6.7)	3.0 (1.0-5.0)	0.07