FREQUENCY, TREATMENT AND EVOLUTION OF PATIENTS WITH REFRACTORY LUPUS NEPHRITIS IN ARGENTINA

Lupus Study group

Lucila Garcia[1], Yessica Soria Curi[2], Maximo Cosentino[1], Santiago Ruta[1], Sofia Velloso[1], Victoria Martire[1], Natali Saravia[3], Micaela Cosatti[4], Virginia Toledo[4], Cecilia Pisonni[4], Mercedes Garcia[1]
[1]Rheumatology department, Hospital Interzonal General de Agudos General San Martín, La Plata, Buenos Aires
[2]Rheumatology department, Hospital Ángel C. Padilla, San Miguel de Tucumán, Tucumán
[3]Rheumatology unit, Hospital General de Agudos Dr. Enrique Tornú, Ciudad de Buenos Aires
[4]Rheumatology unit, Centro de Educación Médica e Investigaciones Clínicas Norberto Quirno (CEMIC), Ciudad de Buenos Aires

Introduction

- Lupus nephritis (LN) ocurrs in 30-50% of SLE patients
- LN is the main cause of morbidity and mortality in SLE
- 20-70% of patients with LN are refractory to standard immunossupresant treatment
- Many therapeutic options are available in case of poor response.

Material and Methods

A retrospective study was carried out in the SLE study group of the Sociedad Argentina de Reumatología (SAR).

Adults patients with LN were included who fulfilled ACR 1982/1997 or SLICC 2012 classification criteria.

Demographic data, antibodies, histologic class of NL and induction treatment (metylprednisolone pulse, Cyclophosphamide, Mycophenolate) were collected.

At month 0, 6 and 12 after second line therapy, SLEDAI and SDI scores, doses of corticoids and laboratory parameters were evaluated.

Objective

1. to analyze the frequency of refractory LN
2. to describe the second line of treatment and the evolution of SLE patients

Results

A14.2% of cases (14/98) was considered refractory LN.

The second line of treatment was MMP plus calcineurin inhibitors in 5 patients (33.3%), extensive CYC treatment in 5 cases, rituximab (13.3%) and rituximab combined with MMP and CYC in one patient, respectively.

At the moment to start the second line therapy, mean SLEDAI was 14.5 points (SD: 6) with improvement at month 6 and 12 (8 points [SD:4.7, p= 0.01] and 3.9 points [SD: 3.3, p= 0.0001]), respectively. Mean prednisone doses used at month 0, 6 and 12 was 27.6 mg/day (SD: 14.9), 12 mg/d (SD: 6.1, p= 0.004) y 5 mg/d (SD: 4.4, p= 0.0001), respectively.
A 83.3% of patients had active urine analysis that it dropped to 36.3% after one year (p= 0.02) and mean proteinuria in 24 hours was 3.9 grams, and it improved at month 6 and 12 (p= 0.003).

TABLE 1. Demographic data, antibodies profile and first line treatment used in LN patients

Variable	Total patients n= 98
Female sex n (%)	86 (87.7)
Mean age at SLE diagnosis (years)	25.1 (SD: 9.1)
Ethnicity n (%)	
white	12 (12.2)
Amerindian	6 (6.1)
Mestizo	80 (80.1)
Afroamerican	1 (1.0)
Time to evolution of SLE (months)	119.2 (SD: 97)
Autoantibodies profile n (%)	
ANA	93/98 (94.8)
DNAdc at SLE diagnosis	68/96 (70.8)
Sm	39/95 (41)
Ro	37/96 (38.5)
La	15/96 (15.6)
RNP	31/91 (34)
aCL IgM/ IgG	26/90 (28.8)
B2GPI IgM/ IgG	14/81 (17.2)
IL	35/91 (38.4)
First line therapy n (%)	
Pulses of methylprednisolone	62/98 (63.2)
Cyclophosphamide	43/98 (43.8)
Mofetil Mycophenolate	37/98 (37.7)
Cyclophosphamide + Mycophenolate	18/98 (18.3)

TABLE 2. Second line therapy, response and dialysis requirement

	Refractory Patients N: 14 (%)	Complete Response N (%)	Partial Response N (%)	Non response N (%)	Dialysis requirement N (%)
MMP + CNI	5/14 (35.7)	1/5 (20)	1/5 (20)	3/5 (60)	1/5 (20)
Extensive CYC	5/14 (35.7)	1/5 (20)	4/5 (80)	-	-
RTX monotherapy	2/14 (14.2)	-	2/2 (100)	-	-
RTX + MMP	1/14 (7.1)	-	-	1/1 (100)	1/1 (100)
RTX + CYC	1/14 (7.1)	-	1/1 (100)	-	-

Conclusion

The frequency of refractory LN was 14.2%.
Only four patients had no response to second line treatment and two cases needed dialysis.