

# FREQUENCY OF ANTI- NEUTROPHILS CYTOPLASMIC ANTIBODIES IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: ACTIVITY AND DAMAGE ACCRUAL

Segura C<sup>1</sup>, Quevedo P<sup>1</sup>, Demarchi J<sup>1</sup>, Zaffarana C<sup>1</sup>, Gómez A<sup>1</sup>, Bartel G<sup>1</sup>, Caicedo A<sup>2</sup>, Papisidero S<sup>2</sup>, Earsman G<sup>1</sup>.

(1) Section of Rheumatology “British Hospital of Buenos Aires (Argentina)”, (2) “Hospital Gral. de Agudos Dr. E. Tornú (Argentina)”

## INTRODUCTION

- Neutrophil cytoplasmic antibodies (ANCA) have been reported with a frequency between 3-69% in systemic lupus erythematosus (SLE). There are discordant results about its positivity and correlation with the activity of the disease.

## OBJECTIVES

To determine the frequency of ANCA in SLE patients and investigate if there are differences between the disease activity and damage accrual in patients ANCA positive vs. ANCA negative.

## MATERIALS AND METHODS

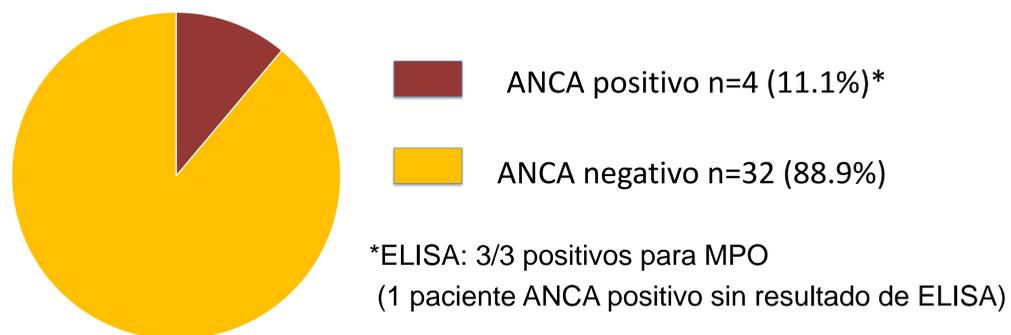
Cross-sectional study that included patients diagnosed with SLE according to the SLICC / ACR 2012 criteria, older than 18 years, followed in two rheumatology services of Buenos Aires city (Argentina). The presence of ANCA was measured by indirect immunofluorescence (IFI), myeloperoxidase (MPO) and proteinase 3 (PR3) was investigated by ELISA (enzyme-linked immunosorbent assay). Sociodemographic, laboratory, and disease characteristics data were collected from medical records. At the time of inclusion, the Systemic Lupus Erythematosus Disease Activity Index (SELENA-SLEDAI) and Systemic Lupus International Collaborating Clinics / American College of Rheumatology Damage Index (SLICC) scores were performed. Statistic analysis. Descriptive statistics. T student test, Mann Whitney, chi2 and Fischer exact test.

## RESULTS

### Baseline characteristics of 36 lupus patients

N (%)		36 (100)
Female patients n (%)		30 (83)
Age (SD)		41.1 (13.83)
Etnia n (%)	Caucasic	29 (80.56)
	Amerindio	2 (5.56)
	mestizo	4 (11.1)
	afrocaribbean	1 (2.78)
Evolution time in months(SD)		91.05 (71.49)
SLEDAI score (SD)		4.30 (5.83)
SLICC/ACR (SD)		0.38 (1.07)
Immunology laboratory	ANA	36 (100)
	Anti DNA	15 (41.67)
	Anti Ro/SSA	9 (25)
	Anti La/SSB	4 (11.1)
	Anti sm	10 (27.78)
	Anti RNP	8 (22.22)

### Frecuencia de ANCA en LES



### Comparison of clinical characteristics between ANCA (+) patients vs. ANCA (-)

	ANCA (+)	ANCA (-)	P
n (%)	4 (11.1)	32 (88.8)	
Edad (Años) x (DE)	46.25 (5.61)	40.46 (14.46)	NS
<b>T. evolución (Años)</b>	<b>12.25 (4.64)</b>	<b>7 (5.9)</b>	<b>0.03</b>
SLEDAI x (DE)	6 (6.92)	4.09 (5.77)	NS
SLICC x (DE)	1.5 (2.38)	0.25 (0.76)	NS
Anti-DNA n (%)	2 (50)	13 (40.62)	NS
<b>PCR elevada n (%)</b>	<b>3 (75)</b>	<b>8 (25)</b>	<b>0.028</b>
VSG elevada n (%)	4 (100)	19 (59)	NS
Hipo C3 n (%)	1 (25)	9 (28.1)	NS
Hipo C4 n (%)	1 (25)	14 (43.75)	NS
Anti Ro/SS-A n (%)	1 (25)	8 (25)	NS
Anti-La/SS-B n (%)	0	4 (12.5)	NS
Anti-Sm n (%)	3 (75)	7 (21.87)	NS
Anti-RNP n (%)	1 (25)	7 (21.87)	NS
Glomerulonefritis n (%)	2 (50)	7 (21.87)	NS
Proteinuria n (%)	1 (25)	8 (25)	NS
Anemia n (%)	2 (50)	7 (21.8)	NS
Leucopenia n (%)	0	5 (15.6)	NS
SAF n (%)	0	4 (12.5)	NS

## CONCLUSIONS

- ✓ 36 SLE were included, ANCA (+) prevalence was 11%, the perinuclear pattern and anti myeloperoxidase were found more frequently.
- ✓ The univariate análisis revealed that ANCA (+) was significantly associated with more evolution time and CRP serum leves
- ✓ Likewise, SLEDAI score and SLICC/ACR damage index were more higher in ANCA (+) tan ANCA negative but without significant difference
- ✓ We can conclude that ANCA measure can be useful to determine the severity in Lupus patients taking into account its paper in the pathophysiology of endotelial and inflamatory cascade activation in vasculitis..

## BIGLIOGRAPHY

1. Nishiya K, Chikazawa H, Nishimura S, Hisakawa N, Hashimoto K. Anti-neutrophil cytoplasmic antibody in patients with systemic lupus erythematosus is unrelated to clinical features. Clin Rheumatol. 1997;16(1):70–5.
2. Isenberg D, Adler M. Autoantibodies in Systemic Lupus Erythematosus. Syst Lupus Erythematosus A Companion to Rheumatol. 2007;(December 2002):156–62.