

Original Paper

# Frequency of anti neutrophil cytoplasmic antibody (ANCA) in patient with systemic lupus erythematus and its association with disease activity

Navid Rahimi <sup>1</sup>, Nafiseh Abdolahi (M.D)<sup>2</sup>, Sima Sedighi (M.D)<sup>3</sup>  
Mehrdad Aghae (M.D)<sup>4</sup>, Atefeh Rezaeifar (M.D)<sup>\*5</sup>

<sup>1</sup>(First Author) Medical Student, Student Research Committee, Golestan University of Medical Sciences, Gorgan, Iran. <sup>2</sup>(First Author) Assistant Professor, Rheumatology Research Center, Golestan University of Medical Sciences, Gorgan, Iran. <sup>3</sup>Rheumatologist, Rheumatology Research Center, Golestan University of Medical Sciences, Gorgan, Iran. <sup>4</sup>Associate Professor, Rheumatology Research Center, Golestan University of Medical Sciences, Gorgan, Iran. <sup>5</sup>Internist, Clinical Research Development Unit, Sayyad Shirazi Hospital, Golestan University of Medical Sciences, Gorgan, Iran.

## Abstract

**Background and Objective:** Systemic lupus erythematosus (SLE) is an autoimmune disease with clinical symptoms. Anti neutrophil cytoplasmic antibody (ANCA) is common in vasculitis which is reported in SLE. This study was done to determine the frequency of ANCA in patient with SLE and its association with disease activity.

**Methods:** This descriptive study was conducted on 80 patients with SLE whom referred to rheumatology clinic in Gorgan, northern Iran during 2012-15. The patients disorder diagnosed based on the ACR Criteria. According to the disease activity the patients divided to active group and inactive group. Demographic data was completed with questionnaire and blood sample collected in order to evaluate of for serum ANCA by using ELISA method.

**Results:** The average age was  $37.5 \pm 12.4$  year. Seven (8.5%) patients were males. 91.5% of patients was females. 27 patients (33%) had active lupus and 53 (57%) had inactive lupus. Only one patient has been reported as positive for ANCA. The patient was a 45 years woman with history of 10 years of lupus nephritis with active disease.

**Conclusion:** There was no relationship between ANCA and disease activity. The main reason for this finding can be a few numbers of positive cases in this study.

**Keywords:** Systemic lupus erythematosus, Anti neutrophil cytoplasmic antibody, Disease activity

---

\* **Corresponding Author:** Rezaeifar A (M.D), E-mail: [atefehrezaeifar@yahoo.co.uk](mailto:atefehrezaeifar@yahoo.co.uk)

Received 14 Nov 2017

Revised 25 Apr 2018

Accepted 25 Apr 2018

Cite this article as: Rahimi N, Abdolahi N, Sedighi S, Aghae M, Rezaeifar A. [Frequency of anti neutrophil cytoplasmic antibody (ANCA) in patient with systemic lupus erythematus and its association with disease activity]. J Gorgan Univ Med Sci. 2018 Autumn; 20 (3): 99-103. [Article in Persian]

Orcid id: Navid Rahimi: 0000-0001-5380-8538, Nafiseh Abdolahi: 0000-0003-1190-5449, Sima Sedighi: 0000-0002-0328-0728, Mehrdad Aghae: 0000-0002-0143-7306, Atefeh Rezaeifar: 0000-0002-7598-6463