

## LETTER TO THE EDITOR

# Antinuclear Antibody Among Post COVID-19 Cases: a Preliminary Report

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SARS CoV2 infection is an important new disease which is already causing many million infections worldwide. This coronavirus infection is a respiratory tract infection that can cause many clinical problems and death might be the most serious outcome. The abnormal immunological process due to COVID-19 is possible and autoimmunity is an interesting clinical entity [1,2]. There are many reports on the detection of antinuclear antibody (ANA) among COVID-19 patients. However, an important question that is less clarified is whether ANA preexisted before infection or not.

Here, the authors report on the ANA test result after COVID-19. The data on overall 40 patients (10 males, 30 females; all Asian, aged range 30 - 70 years with average  $44.8 \pm 14.8$  years) who have ever had a previous negative result of ANA. All did not take any personal medication. The protocol of this work was approved by the local ethical committee (MAC 2021-19, approved 8 April 2021). After infection, analysis of ANA is done at 4 weeks (day 120) after recovery from COVID-19 and discharged from hospital with the confirmation of two negative RT-PCR results. From all cases, 2 cases (all females) were ANA positive (both cases had a fine speckle pattern, titer = 1:60). The rate of ANA positivity after COVID-19 in persons who have evidence of no pre-COVID-19 positivity is equal to 5% (0% in male, 6.67% in female). Additionally, data on other 40 age and gender matched patients, who have ever had a history of previous negative result of ANA

are also analyzed as a control group and all have a negative ANA result.

Further studies on this issue are recommended. According to our best knowledge, this report might be the first world report on preliminary observation on ANA among post-COVID-19 cases, who have confirmation of previous negative ANA. In this study, in the positive case, the titer of ANA is 1:60, which may not mean a lot. It might be either a true positive or false positive or insignificantly found to be positive. Regarding the speckle pattern, it is a pattern that is detectable in SLE. Few healthy subjects, about 3%, might have a low titer of ANA and considered false positive. In the elderly, there might be an increased chance of false positive ANA ratio. However, most subjects in this work are not elderly. In addition, based on the fact that all cases have a clear history of no previous ANA positive result, the observation on positive ANA is an interesting issue for further research.

**Declaration of Interest:**

None.

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