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Self SARS Covid-19 IgG Antibody Test Analysis after One Year

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A B S T R A C T

Covid 19 or novel corona virus Produces lots of challenges to medical fraternity, this paper gives idea about antibody produced and its trend after one year. This whole study carried out by author on himself. Although this study is individual's antibody response, but it can give Idea for further improvement in covid-19 treatment.

Keywords:Covid, Igg Antibody, Immunoglobin, Covishield vaccine,Self Covid antibody.

I Introduction

The severe acute respiratory syndrome i.e. SARS Cov-19, has affected almost all the world. It's almost 2 year that patient zero found in Wuhan China. First Case of of Covid -19 in the India found in January 2020. First wave of Corona starts in India in April 2020.I was infected by Covid-19 in September 2020, at that time I have done different Pathology test like CRP, total blood count etc along with that I also carried out IGG antibody test for sake of curiosity. After one year of Covid 19 infection I have again carried out Covid-19 antibody test to verify the availability of antibody after 1 year.This paper emphasis on trend of IgG antibody after 1 year exclusively for my case.

Test Result

Table I

Age-35 Male

Sr No	Test	Date	Result	Reference
1	RTPCR-	22/09/2020	Covid-19 Positive	Positive-Covid-19 infection
2	IgG antibody test	26/10/2020	3.22 AU/ml	< or = 0.80 (Non-Reactive) > or = 1.00 (Reactive)
3	RTPCR	10/10/2020	Covid-19 Negative	No Covid-19 infection
4	IgG antibody test	18/09/2021	0.07 AU/ml	< or = 0.80 (Non-Reactive) > or = 1.00 (Reactive)

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Table II

Vaccine Taken		
AstraZeneca vaccine Covishield Dose 1st Dose	Date-26/03/201	Mild Fever
AstraZeneca vaccine Covishield Dose 2nd Dose	28/06/2021	No Side effect

2. Analysis

Second wave of Covid-19 creates lots of challenges. Due to this who recovers from first wave gave very useful data for patient treatment, as third wave in India is predicted in October 2021. As I am recovered from covid-19 in September 2020, I did Covid-19 IgG antibody test that time. It's almost 1 year after I have again carried out IgG Antibody test and results gives very useful data for analysis. This data show that, for my case IgG antibody decreases from positive to Negative.it mean that IgG antibody reduced, after 1 year of span. It's although quite obvious but the trend show very drastic reduction of IgG antibody in my case. (Table I) An IgG antibody, also called an immunoglobulin, is a protective protein produced by the immune response in response to the presence of antigen. IgG mainly binds antigen and recognition of antigen also.it is mainly plays important role in long term immunity after infection or vaccination. Early phase antibody response by body is IgM antibody which generated after early infection. There is IgA antibody also which mainly present in serum, nasal mucus etc.

3. IgG, IgM, and IgA antibody Test

Generally Levels of IgM and IgA begin to reduce starting 3 weeks post-infection while IgG persists for longer. Exactly how long this antibody remain is unknown. Vaccine also induces antibodies which persist for some period of time and can be increased by booster dose. IgG antibody typically has a long retention and will remain above detectable months or even years after the resolution of infection. For curiosity point of view I did IgG antibody test at the time of infection and after 1 year of infection. The idea regarding igG antibody testing after 1 year came from SARS 2002 survey, where Recovered people from SARS 2002 still have antibodies after almost 20 Years.this information is very useful in SARS-19 analysis also as both the virus belong to Same family. Based on experience of same kind of viruses, if reinfection occurs the severity of dieses reduce drastically. Many studies also confirm that lack of antibodies doesn't mean person is highly susceptible as memory B cells generate antibodies on re-exposure.

4. Conclusion

although IgG is lack after Some Span of time it does not necessarily mean that a person is not immune to Covid-19, memory B-cell response generated from prior infection or vaccination may still give protection upon again Exposure to Covid. In my case IgG antibodies are reduced drastically but still it is expected that severity might be reduced due to memory cell antibodies.also vaccination can reduce severity drastically. The test vary person to person and population to population hence can give idea about trend of antibodies in perticular demographics and perticular varient of Covid -19.

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REFERENCES

Although this paper mainly consists of self-antibody analysis, I refer some research paper.

[1] Sohrabi C., Alsafi Z., O'Neill N., Khan M., Kerwan A., Al-Jabir A. World Health Organization declares global emergency: a review of the 2019 novel coronavirus (COVID19) *IntJSurg.* 2020doi: 10.1016/j.ijsu.2020.02.034. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

[2] UNDERSTANDING ANTIBODY TESTING FOR COVID J Arthroplasty. 2020 Jul; 35(7): S74–S81. Published 2020 Apr 27. doi: 10.1016/j.arth.2020.04.055