Awareness Among the Immunity And Immune System, And How To Fight With Covid-19

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ABSTRACT

The Immune system protects us from infectious diseases. It produces an antibody to kill pathogenic microorganisms. This Editorial letter general awareness among the immunity and immune system, and how to fight with Covid-19. It illustrates the process of the immune system, how it works, and mechanism of the immune system to fight against virus. Various types of potential challenges are also involved in the immunes system. This editorial letter can be used as a state of the art at this critical moment to the globe for a promising to solutions related to the survival of people from Covid-19.

Keywords: Covid-19; Antibodies; Immunity system; General awareness.

INTRODUCTION

The improvement of immunity to a pathogen through natural infection is a multi-step process that typically takes place over 7-14 days. The body responds to a viral infection immediately with a non-specific innate response in which macrophages, polymorphs, and dendritic cells slow the progress of virus and may even prevent it from causing symptoms. This non-specific response is followed by an adaptive response where the body makes antibodies that specifically bind to the virus. These antibodies are proteins called immunoglobulins. The body also makes T-cells that recognize and eliminate other cells infected with the virus. This is called cellular immunity. This combined adaptive response may clear the virus from the body, and if the response is strong enough, may prevent progression to severe illness or re-infection by the same virus. This process is often measured by the presence of antibodies in blood [1].

Laboratory tests that detect antibodies to SARS-CoV-2 in people, including rapid immunodiagnostic tests, need further validation to determine their accuracy and reliability. Inaccurate immunodiagnostics tests may falsely categorize people in two ways. The first is that they may falsely label people who have been infected as negative, and the second is that people who have not been infected are falsely labelled as positive. Both errors have serious consequences and will affect control efforts. These tests also need to accurately distinguish between past infections from SARS-CoV-2 and those caused by the known set of six human corona viruses. Four of these viruses cause the common cold and circulate widely. The remaining two are the viruses that cause Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome. People infected by any one of these viruses may produce antibodies that cross-react with antibodies produced in response to infection with SARS-CoV-2 [2].

DISCUSSION

Mounting evidence from Italy and elsewhere raises serious unknowns about positive antibody tests for SARS-CoV-2. Not all people who recover from the virus make high levels of antibodies and in some cases, people make no antibodies at all. Even those who do make the antibodies may not make the right ones, the so-called neutralizing antibodies that inactivate the virus in the test tube. In some studies, only 15% of those who tested positive for SARS-CoV-2 antibodies made these neutralizing antibodies. And even among those with the "right" type of antibody, there is a question over how long protection against a new infection might last, or if there is any real protection at all [3].

All these questions make it difficult for employers to rely on an antibody test, or even successful convalescence, to determine the risk for infection in the workplace. To be sure, anyone who tests positive for an active infection—whether they are symptomatic or not—should be excluded from the workplace. That much is clear.

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But even someone who tests negative is not necessarily good to return to work, given how many tests fail to detect people who are actually infected and infectious [3]. That means every business must take precautions to avoiding workplace contagion.

**PRECAUTIONS**

Measuring the temperature of everyone reporting to work and every person who enters a workplace. That is especially important for consumer facing businesses, such as shops and restaurants. These temperature checks are not just for staff but should also include any customer who may enter the working space.

Requiring everyone within the workplace to wear masks at all times. Removing a mask in a private office risks contaminating others who enter the space for business or cleaning.

Reducing workplace density by creating staggered shifts, encouraging remote work, spacing work stations, and limiting the number of people in the working space, be they staff members, patrons, delivery persons, or otherwise.

Instituting rigorous cleaning procedures designed to reduce workplace exposure and contamination.

It is unlikely that all workplaces will agree to institute the necessary precautions. The ability to stay open and to remain in business must depend on compliance. That means local, state and federal guidelines for reopening must be clear. It also means that all workplaces be subject to on the spot inspections. Those who don’t follow the guidelines should face the consequences and should be shut down immediately. Workers and employers should be allowed to file anonymous complaints against companies that are not following health and safety guidelines.

These working conditions will not last forever. Eventually the pandemic will pass, and medicine will triumph.

**CONCLUSION**

At this point in the pandemic, there is not enough evidence about the effectiveness of antibody-mediated immunity to guarantee the accuracy of “immunity”. People who assume that they are immune to a second infection because they have received a positive test result may ignore public health advice. The use of such certificates may therefore increase the risks of continued transmission. While most people focus, as they should, on social distancing, face coverings, hand washing and even self-isolation to protect against the deadly corona virus now ravaging the country, too few are paying serious attention to two other factors critically important to the risk of developing a COVID-19 infection and its potential severity. Those factors are immunity, which should be boosted, and inflammation, which should be suppressed. Now pandemic-related restrictions have impacted the lives of millions, and after seeing who is most likely to become infected and die, immunity and inflammation warrant further discussion and public attention.

**REFERENCES**