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Biomarkers in Identification of COVID-19

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Editorial

Wuhan, the most populous city of central China, developed a mysterious circumstance of pneumonia on December 2019, a series of acute respiratory illnesses were reported. The scientists of China recognized this as a novel coronavirus on January 2020. On February 2020, the coronavirus disease spread globally. People infected with SARS-CoV-2, the cause ofCOVID-19, react contrarily. Some patients were asymptomatic, some require to be hospitalized and, for some, the disease became lethal. Hence, it is vital to establish a patient's state in an appropriate method. Biomarkers are quantitative measurements used clinically for many conditions reflecting pathological development.

When considering a patient with COVID-19 contamination, biomarkers can be useful to clinicians in preliminary treatment and close monitoring. The researchers of the world applied Mass Spectrometry Technique to test quickly for the existence and quantity of various proteins in the blood plasma. Investigators found 27 potential biomarkers that exist in various levels in patients with COVID-19 infection, based on the severity of their symptoms. The markers could support clinicians to envisage the severity of patient's illness and provide scientists with new targets for drug development [1]. A test to help doctors predict whether a COVID-19 patient is likely to become critical or not would be invaluable. It will help them make decisions about how to best manage the disease for each patient as well as identify those most at risk. We hope the biomarkers we've identified will lead to the development of these vitally needed tests.

Three of the significant proteins that the scientistsrecognizedwere related with interleukin IL-6, a protein that causes inflammation, a known marker for severe symptoms. The researchers suggest it may be possible to alleviate some of these symptoms by using drugs that target these associated proteins.

Findings of these studies have discovered changes in biomarker levels and may potentially be useful in creating a therapeutic intervention. For instance, one study has reviewed the use of anticoagulation therapy in patients with coagulopathy or marked rise in D-dimers in the setting of COVID-19 [2].Low molecular weight heparin was found to be associated with better prognosis in severe cases. To further asses the role of anti-coagulants as a treatment, we encourage large interventional trails to study this.

Although research is still in its early stages, the discovery of how different biomarkers behave during the course of the disease could help clinicians in identifying severe disease earlier and subsequently improve prognosis. Nevertheless, we urge for more research across the globe to corroborate these findings.

In conclusion, the work up to the present timerecommends that there is clear confirmation of how the levels of biomarkers may change according to severity of COVID-19 infection. This can be used as an adjunct in clinical practice to guide treatment and admission to ICU. By this, it may improve prognosis and minimize the mortality rates. However, being in the infant stages of understanding the pathology of this infectious disease, we urge for further research worldwide to better understand the changes noted here.

References

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