

# Post-Covid-19 Pandemic: A Friend or Foe

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## Abstract

The year 2020 would be remembered for ages due to the biohazard war that we have witnessed. Hypercoagulability is something that's been spoken behind the doors. Practically, the numbers of cerebrovascular accidents have faced a drastic upsurge since the pandemic. The reason can be attributed to the viral genomics but post-pandemic up-surge mainly in brain ischaemic insult continues to surprise the clinicians around the globe. This mini review discusses the after myths of the global pandemic and the future layover. The global vaccination campaign was introduced in the same year to fight against the virus. Moreover, increasing vaccinations can be put to a percentage of neuro-insults today? Well, further research in-addition to Covid-19 and the vaccination profile is a must.

*Keywords: Post-Covid-19, Pandemic, cerebrovascular accidents*

## Background

Covid-19 presented as a shock and with an unpredicted clinical outcome to the globe, the virus spread like a fire irrespective of developed or non-developed world. Every country faced an undercover massacre of humanity and with such trivial time to react. Usually, a respiratory flu illness follows a prodrome symptoms but with Covid, long term effects such as brain fog, strokes, sudden cardiac death in young have recently been the talk of the town. We are still in preliminary stage to fully understand the exact pathogenesis behind the Covid-associated neuro-insult. From increase in coagulable blood flow to the leakage in the Blood-Brain Barrier with/out the presence of inflammatory cytokines, collectively result in aggravated damage.

Hemorrhagic Strokes are less common than Ischaemic Strokes in post-Covid patients. Moreover, dual, or triple vaccinated people are also presented with acute ischemic stroke insult. This could be attributed to the fact that vaccines were produced in consideration to subtle clinical/nonclinical research. Recent study has shown adults 50 years or younger at higher risk of acute ischaemic stroke during the convalescent period of COVID infection. Furthermore, it is still a dilemma of how do asymptomatic covid patients react to hypercoagulable state.

As a result, there is a pressing need for *in-vitro* research on the Blood-Brain Barrier integrity and function, demonstrating the on-or after-ischaemic insults associated with covid infection. Furthermore, inflammatory cytokines play dominant role in the breakage of the BBB and may attribute to the similar pathogenesis in covid related damage. Previously, we conducted *in-vitro* research on the triple culture human BBB during and after ischaemic insult and presented different time dependent leakage in the BBB with presence various pro-inflammatory cytokines [1]. Hence, likewise experiments are required to study the covid associated brain insult. We can further, access the outcome of tight junction proteins (claudin-5) following the infection. These experiments can be conducted with the blood serum samples of Covid patients or those have had at least one attack possible.

Clinically, post Covid patients should be timely monitored for additional parameters such as blood sugar levels, blood pressures, hemoglobin, lipid profiles and six-monthly cardiac work up. Those with history of diagnosed hypertension or diabetes are advisable to add anti platelets as prophylaxis.

In conclusion, a better understanding of post covid outcomes is required with prompt action. Regular screening and further deep research clinical/nonclinical should be initiated.

## Reference

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