

# Heart Problems, COVID Infection, Long COVID and COVID Vaccines: Micro Blood Clots Connect All

The medical establishment and mainstream media are ignoring micro clots

By [Joel S. Hirschhorn](#)

Global Research, March 03, 2022

Theme: [Media Disinformation](#), [Science and Medicine](#)

All Global Research articles can be read in 51 languages by activating the “Translate Website” drop down menu on the top banner of our home page (Desktop version).

To receive Global Research’s Daily Newsletter (selected articles), [click here](#).

Visit and follow us on Instagram at [@globalresearch\\_crg](#) and Twitter at [@crglobalization](#).

\*\*\*

*When The Washington Post does a front page [story](#) on myriad heart problems plaguing people who recovered from COVID infection it is big news. Cardiology practices across the country are being overwhelmed by post-COVID heart patients. “Long” COVID has been getting increased attention. Huge numbers of people are suffering long after getting through the initial infection.*

What is important is the lack of attention to what research has found to be an important impact of spike proteins, namely micro blood clots. Toxic spike proteins invade bodies from COVID infection and also the major COVID vaccines. Those spike proteins can cause widespread micro blood clots. They can impede oxygen getting to all organs and the brain, leading to myocarditis or heart inflammation, heart attacks and strokes, for example.

There is no attention in the Post story to either micro blood clots or whether COVID victims also were recipients of COVID vaccines. There is a very high probability that recovered COVID victims succumbed to all the government coercion and propaganda and got the vaccine shots, even though they have natural immunity that the government has not given credit for.

Physicians also are likely seeing “COVID” patients who never had proven COVID infection but were vaccinated. Surely there have been millions of Americans who might have been infected but were asymptomatic and did not have a positive test result. They may assume they were infected! And they very likely got vaccinated. *Physicians seeing these people who are complaining of long COVID symptoms may actually be seeing people suffering from vaccine impacts.*

## Key research study

Feeding the Post story was a new medical research [article](#) titled “Long-term cardiovascular outcomes of COVID-19.” The Post noted that one of the authors describes the pandemic as an earthquake. “When the earth stops shaking and the dust settles, we will have to be able

to deal with the aftermath on heart and other organ systems,” he said. “Governments around the world need to pay attention...We are not sufficiently prepared.”

But this study did not assess whether COVID vaccination played a role in heart problems. The researchers compared more than 150,000 veterans who survived for at least 30 days after contracting COVID-19 with two groups of uninfected people: a group of more than five million people who used the VA medical system during the pandemic, and a similarly sized group that used the system in 2017, before SARS-CoV-2 was circulating.

The study found that there is a high risk of 20 diseases of the heart and blood vessels for at least a year after a COVID-19 diagnosis. The rates of many conditions, such as heart failure and stroke, were substantially higher in people who had recovered from COVID-19 than in similar people who hadn't had the disease. This was the case even for those who were under 65 years of age and lacked risk factors, such as obesity or diabetes.

Here are two illustrative findings: COVID victims were 52% more likely to have had a stroke than the contemporary control group, and risk of heart failure increased by 72%,

## **Long covid has clot cause**

Medical research has found micro clots as the likely cause of “long” COVID. Yet the mainstream media is ignoring this.

In October 2021 the material in this [article](#) discussed what was originally [published](#) in the journal Cardiovascular Diabetology in August 2021 titled “Inflammatory micro clots in blood of individuals suffering from Long COVID.” The research was done at Stellenbosch University in South Africa. Researchers found an overload of various inflammatory molecules, ‘trapped’ inside insoluble microscopic blood clots (micro clots), in the blood of individuals suffering from lingering symptoms associated with long COVID.

This important finding was made by Prof. Resia Pretorius, a researcher in the Department of Physiological Science at Stellenbosch University.

“We found high levels of various inflammatory molecules trapped in micro clots present in the blood of individuals with Long COVID. Some of the trapped molecules contain clotting proteins such as fibrinogen, as well as alpha(2)-antiplasmin,” Pretorius explained.

The insolubility of the micro clots became apparent through specific analysis of blood plasma samples from both individuals with acute COVID and long COVID. The researchers found that in both cases there was the same cardiovascular and clotting pathologies. In other words, this research connects both conditions with micro blood clots.

## **The Guardian article**

Though ignored in the US, this research was seen as a very important development in a January 2022 [article](#) in The Guardian with the heading “Could microclots help explain the mystery of long Covid?” It was written by Resia Pretorius. “My lab has found significant microclot formation in long Covid patients. Unfortunately, these are missed in routine blood tests.” They are also missed by scan and imaging technologies.

Here are more excerpts from this article that was aimed at informing the world about the

importance of micro clots.

“One of the biggest failures during the Covid-19 pandemic is our slow response in diagnosing and treating long Covid. As many as 100 million people worldwide already suffer from long Covid. That staggering number will eventually be much higher, if we take into account that diagnoses are still inadequate, and that we still do not know what the impact of Omicron and future variants will be.”

“Patients with long Covid complain of numerous symptoms, the main ones being recurring fatigue and brain fog, muscle weakness, being out of breath and having low oxygen levels, sleep difficulties and anxiety or depression. Some patients are so sick that they cannot work or even walk a few steps. There is possibly also an elevated risk of stroke and heart attacks. One of the biggest sources of concern is that even mild and sometimes asymptomatic initial Covid-19 infection may lead to debilitating, long-term disability.”

“Since early 2020, we and other researchers have pointed out that acute Covid-19 is not only a lung disease, but actually significantly affects the vascular (blood flow) and coagulation (blood clotting) systems.”

“The presence of persistent microclots and hyperactivated platelets (also involved in clotting) perpetuates coagulation and vascular pathology, resulting in cells not getting enough oxygen in the tissues to sustain bodily functions (known as cellular hypoxia). Widespread hypoxia may be central to the numerous reported debilitating symptoms.”

If COVID vaccines create the same type of micro blood clots, then the same health impacts would be expected!

***And here is what long COVID victims need to know:***

“So why can long Covid patients not go to their nearest clinic or health care practitioner to find treatment options? Currently there are no general pathology tests readily available to diagnose these patients. Desperately ill patients are told that their pathology test results are within normal/healthy ranges. Many are then told that their symptoms are possibly psychological and they should try meditation or exercise. The main reason the traditional lab tests do not pick up any of the inflammatory molecules is that they are trapped inside the fibrinolytic-resistant microclots (visible under a fluorescence or bright-field microscope, as our research has shown). When the molecular content of the soluble part of the plasma is measured, the inflammatory molecules, including auto-antibodies, are simply missed.”

The same would hold true for vaccinated people with micro blood clots.

**Autopsies find micro clots**

The medical literature provides findings of micro blood clots from autopsies. An article [published](#) in 2020 by Dr. Amy Rapkiewicz, the chairman of the department of pathology at NYU Langone Medical Center is important. Describing the work in a [news story](#) was this: “The clotting was not only in the large vessels but also in the smaller vessels. And this was dramatic, because though we might have expected it in the lungs, we found it in almost every organ that we looked at in our autopsy study,” the researcher said.

This too was [noted](#) in another news story: “We knew that clinical people were finding clots in these [COVID] patients,” she said. “So although I knew that that was going to be there, I didn’t expect it at the microscopic level to the degree that I saw it.” Her autopsy study found blood clots in small vessels of the patients’ lungs, hearts, kidneys and livers.

In another news story this was [noted](#) in 2020 about research at Harvard University:

“Researchers also noted that patients with the novel coronavirus suffered many microscopic blood clots. In a stark difference with lungs infected with the flu, the microclots were nine times as present in areas of the lungs that allow the passage of oxygen into the patient’s bloodstream while carbon dioxide is emitted.”

This is from the [published](#) medical study: “Histologic analysis of pulmonary vessels in patients with Covid-19 showed widespread thrombosis with microangiopathy. Alveolar capillary microthrombi were 9 times as prevalent in patients with Covid-19 as in patients with influenza.” In other words, micro blood clots were uniquely associated with COVID infection.

This is the title of a May 2020 [medical article](#): “Pathophysiology of SARS-CoV-2: Targeting of endothelial cells renders a complex disease with thrombotic microangiopathy and aberrant immune response. The Mount Sinai COVID-19 autopsy experience.” Here is the summary of the findings; note the word micro:

“Autopsies were performed at the Mount Sinai Hospital on 67 COVID-19 positive patients and data from the clinical records were obtained from the Mount Sinai Data Warehouse. The experimental design included a comprehensive microscopic examination carried out by a team of expert pathologists, along with transmission electron microscopy.”

“We report a comprehensive autopsy series of 67 COVID-19 positive patients revealing that this disease, so far conceptualized as a primarily respiratory viral illness, also causes endothelial dysfunction, a hypercoagulable state [an increased tendency to develop blood clots], and an imbalance of both the innate and adaptive immune responses. Novel findings reported here include an endothelial phenotype of ACE2 in selected organs, which correlates with clotting abnormalities and thrombotic microangiopathy, addressing the prominent coagulopathy and neuropsychiatric symptoms. Another original observation is that of macrophage activation syndrome, with hemophagocytosis and a hemophagocytic lymphohistiocytosis-like disorder, underlying the microangiopathy [disorder involving small blood vessels] and excessive cytokine release.”

# Pathophysiology of SARS-CoV-2: Targeting of endothelial cells renders a complex disease with thrombotic microangiopathy and aberrant immune response. The Mount Sinai COVID-19 autopsy experience

May 2020

DOI:[10.1101/2020.05.18.20099960](https://doi.org/10.1101/2020.05.18.20099960)

Authors:



**Clare Bryce**  
Mount Sinai Hospital



**Zachary Grimes**



**Elisabet Pujadas**  
Icahn School of Medicine at Mount Sinai



**Sadhna Ahuja**

[Show all 49 authors](#)

Screenshot from [ResearchGate](#)

In other words, this study also found evidence of micro clots in COVID victims.

## Micro clots caused by COVID vaccines

All the results on micro clots in COVID and long COVID victims should be seen as holding for the same type clots in vaccinated people.

The [work](#) of **Dr. Sucharit Bhakdi** is critical. He has noted:

“immune and blood-related categories of risks from *vaccines*: (1) Clotting from the direct action of spike protein in the bloodstream; (2) Further clotting from the immune system attacking spike-producing endothelial cells.” This too was [said](#): “The RNA injected into your body [from vaccines] are going to enter the cells that line blood vessels. He points to spiny spike protein that these cells will generate and protrude outwards to attract blood platelets and form micro-clots. Days after vaccination, white blood cells known as lymphocytes as well as antibodies will begin to mount an attack against these cells. If you dare to repeat this (get the second jab), “God help you” warns Dr Bhakdi.” He warned about the blood clot side-effects months before the roll-out of the mRNA vaccines.

## Canadian doctor blew the whistle about micro clots from vaccines

Months ago in July 2021 a brave and smart Canadian doctor, **Charles Hoffe**, went [public](#) with his findings on COVID vaccinated patients. Using the d-dimer test of blood he found that 62% of hundreds of his vaccinated patients had high numbers indicating the presence of micro blood clots. A d-dimer test measures the amount of degraded fibrin in the blood.

He did more than just release that finding. He said that the use of mRNA vaccines would “kill most people through heart failure.” This supports invoking vaccine shots as a cause of what is now being associated just with long COVID.

In plain language he said that the mRNA shots are programmed to turn a person’s body into a spike protein “factory,” and that over time these mass-produced spike proteins cause progressive blood clotting.

He said what other medical experts have expressed, namely that only 25 percent of the ‘vaccine’ injected into a person’s arm actually stays in your arm. The other 75 percent is collected by your lymphatic system and literally fed into your circulation so these little packages of messenger RNA invade your body. And in a single dose of Moderna ‘vaccine’ there are literally 40 trillion mRNA molecules.

Dr. Hoffe said that while these packages were designed by Big Pharma to be absorbed directly into people’s cells, the only place they can actually be absorbed is around the blood vessels and into capillary networks, which are the tiniest blood vessels where blood flow is slow and where genes are released.

“Your body then gets to work reading and then manufacturing trillions and trillions of these spike proteins,” he said. “Each gene can produce many, many spike proteins. The body then recognizes these are foreign bodies so it makes antibodies against it so you are then protected against COVID. That’s the idea.”

**Now we know that this theory does not assure destruction of the virus or transmission of it, nor effective immunity.**

Here is what you need to understand: Though the claim has long been that these spike proteins act as a deterrent to viral infection after being injected into a person’s body, the reality is that they actually become part of the cell wall of a person’s vascular endothelium or linings of the blood vessels. In very small diameter blood vessels, the spikes have a big impact on blood flow.

Your blood vessels are supposed to be smooth so that your blood flows smoothly. After spike proteins invade your body the small blood vessels have these little spikey bits sticking out which impede blood flow and can cause clots. And if you get a lot of clots, then your blood platelet count can greatly decrease, and this can lead to bleeding problems.

Dr. Hoffe says it is an inevitability that the vaccine injected will develop blood clots because as the vaccine-inserted spike proteins embed themselves within blood vessels and capillaries, blood platelets circulate around trying to fix the problem by creating increasingly more clots.

“So, when the platelet comes through the capillary it suddenly hits all these COVID spikes and it becomes absolutely inevitable that blood clots will form to block that vessel,” he writes. Therefore, these spike proteins can predictably cause blood clots. They are in your blood vessels (if mRNA ‘vaccinated’) so it is guaranteed.”

What must be remembered is that these blood clots are different than the “rare” ones spoken about by physicians that show up on CT scans and MRIs or even ultrasound images. These are microscopic and do not show up on those tests; they can be detected using the d-dimer blood test, that is not routinely used.

Why some people do not get the clots is not entirely clear. They may benefit from a very healthy vascular system.

“The most alarming part of this is that there are some parts of the body like the brain, spinal cord, heart and lungs which cannot [regenerate],” he said. “When those tissues are damaged by blood clots, they are permanently damaged.” That is the deadly issue for understanding why there are huge numbers of vaccinated people who have suffered death or a broad array of serious health impacts from COVID vaccines.

## Conclusions

The central medical thesis of this analysis is that micro clots are a condition in three groups: those infected by the COVID virus, those suffering from long COVID, and those who have received COVID mRNA vaccines. The harmful health impacts in all three groups are extensive and myriad. Ordinary medical testing does not find micro clots. Most physicians seem oblivious to this blood disorder and its impacts on the body, including serious cardiac conditions and deaths.

\*

Note to readers: Please click the share buttons above or below. Follow us on Instagram, @globalresearch\_crg and Twitter at @crglobalization. Forward this article to your email lists. Crosspost on your blog site, internet forums, etc.

*This article was originally published on [Pandemic Blunder Newsletter](#).*

**Dr. Joel S. Hirschhorn**, author of [Pandemic Blunder](#) and many articles and podcasts on the pandemic, worked on health issues for decades, and his [Pandemic Blunder Newsletter](#) is on Substack. As a full professor at the University of Wisconsin, Madison, he directed a medical research program between the colleges of engineering and medicine.

*As a senior official at the Congressional Office of Technology Assessment and the National Governors Association, he directed major studies on health-related subjects; he testified at over 50 US Senate and House hearings and authored hundreds of articles and op-ed articles in major newspapers. He has served as an executive volunteer at a major hospital for more than 10 years.*

*He is a member of the Association of American Physicians and Surgeons, and America’s Frontline Doctors and a regular contributor to Global Research*

*Featured image is from Children’s Health Defense*

The original source of this article is Global Research  
Copyright © [Joel S. Hirschhorn](#), Global Research, 2022

---

[Comment on Global Research Articles on our Facebook page](#)

[Become a Member of Global Research](#)

Articles by: **Joel S.**  
**Hirschhorn**

**Disclaimer:** The contents of this article are of sole responsibility of the author(s). The Centre for Research on Globalization will not be responsible for any inaccurate or incorrect statement in this article. The Centre of Research on Globalization grants permission to cross-post Global Research articles on community internet sites as long the source and copyright are acknowledged together with a hyperlink to the original Global Research article. For publication of Global Research articles in print or other forms including commercial internet sites, contact: [publications@globalresearch.ca](mailto:publications@globalresearch.ca)

[www.globalresearch.ca](http://www.globalresearch.ca) contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: [publications@globalresearch.ca](mailto:publications@globalresearch.ca)