

How the Spike Protein Hurts the Heart

Analysis by [Dr. Joseph Mercola](#) ✓ Fact Checked

STORY AT-A-GLANCE

- › The FDA ignored warnings before the vaccine was distributed that it would likely cause organ damage; data published before and after the program was initiated showed it was the spike protein that damaged the microvasculature
- › An analysis of 789 professional athletes with COVID-19 showed no adverse cardiac events in health individuals; however, the VAERS shows 11,793 people who had a heart attack or diagnosed with myocarditis or pericarditis after the jab
- › Data from a patient group treated by Dr. Vladimir Zelenko showed none of the 3,000 patients he treated within the first five day of the onset of COVID-19 went on to develop long-haul symptoms, including fatigue, brain fog or difficulty breathing
- › The list of people reporting adverse events from the jab is growing. To tell their stories, two websites have been created since social media platforms are routinely removing any information about adverse events

This video from the Front Line doctors White Coat Summit was published in mid-August. In it, pathologist Dr. Ryan Cole succinctly outlines many of the health challenges associated with the experimental genetic therapy injection program. He asks, after thousands of people have died from the injection, where are the autopsies to investigate this investigational program?

In July 2021, the U.S. military published a study in *JAMA Cardiology*¹ in which they asked the question if myocarditis was a possible adverse event following a jab with

mRNA COVID-19 injection. They identified 23 men who were diagnosed with myocarditis within 4 days of getting the shot. They determined that there was a diagnosis of myocarditis after “vaccination in the absence of other identified causes.”²

And yet, despite finding myocarditis in previously healthy individuals following the shot, the writers only recommended vigilance. The heart problems in 23 military men who had signed up to protect the citizens of the U.S., “should not diminish overall confidence in vaccinations during the current pandemic.”³

As of September 3, 2021, the vaccine adverse event reporting system (VAERS)⁴ had received 675,591 reports of adverse events following vaccination. Of these, there were 14,506 deaths, 6,422 heart attacks and 5,371 cases of pericarditis or myocarditis.

It is important to note that the VAERS has tracked adverse events since 1990. In 2019, there were 605 reports of deaths from all vaccines given. In 2021, there were 14,594 deaths reported in nine months.

Although these numbers are significant, a 2010 Harvard study commissioned by the Department of Health and Human Services revealed data demonstrating the VAERS likely only represents approximately 1% of those who are injured.⁵

In light of these statistics and knowing the new shot program was experimental, December 18, 2020, the Children's Health Defense chairman and chief legal counsel, Robert F. Kennedy Jr, requested the Biden Administration consider establishing a “comprehensive, high integrity system to monitor adverse outcomes following vaccination.”⁶

In early 2020, many clinicians, scientists and other health experts warned that millions of people may experience potentially permanent or long-term injury or death after the shot. Interestingly, it is the call for greater surveillance of vaccine injury that has, in part, generated censorship from social media platforms through AI surveillance of your posts.

Spike Protein Damages Endothelial Cells and Hurts Heart

Dr. J. Patrick Whelan is a pediatric rheumatologist who warned the FDA of the microvascular injury the vaccine may cause to the kidneys, brain, liver and heart before it was released to the public. Whelan specializes in treating children with multisystem inflammatory syndrome (MIS-C), which is associated with coronavirus infections.⁷

He did not dispute the potential benefit the vaccine might have to arrest the spread of the virus, but instead cautioned that recipients may experience permanent damage to their microvasculature. At the time, his concern was based on data scientists and doctors were reporting after an infection with COVID-19 affected multiple organs beyond the lungs.

In March 2021, a research study was published in the American Heart Association's journal *Circulation*.⁸ However, it is important to note that the study was preprinted online in December 2020,⁹ before the first vaccine was administered in the U.S.¹⁰

This is important, since the study demonstrated that the spike protein associated with SARS-CoV-2 damages endothelial function.¹¹ In other words, before the emergency use authorization jab that injected instructions to create the spike protein was first administered, the CDC, FDA and NIAID were well aware the spike protein was likely causing damage to the endothelial cells lining the circulatory system.

This information was not discussed in the media and not considered by the FDA, and it continues to be buried as government agencies push for 100% vaccination in the U.S. In the study, the researchers created a pseudo-virus¹² that contained the spike protein but did not contain the virus. Using an animal model, they showed that the virus was not necessary to create damage and inflammation.¹³

When the S protein attached to the ACE2 receptor it disrupted signaling to the mitochondria and caused damage and fragmentation. The alterations in mitochondrial function were confirmed as part of the inhibition of ACE2 signaling in the lab.

The results also revealed that the virus could induce endothelial cell inflammation and endotheliitis. The protein reportedly decreased ACE2 levels and impaired nitric oxide bioavailability.¹⁴ Co-senior scientist of the study, Uri Manor, explained in a press release from Salk Institute:¹⁵

“If you remove the replicating capabilities of the virus, it still has a major damaging effect on the vascular cells, simply by virtue of its ability to bind to this ACE2 receptor, the S protein receptor, now famous thanks to COVID. Further studies with mutant spike proteins will also provide new insight towards the infectivity and severity of mutant SARS CoV-2 viruses.”

Further Study Demonstrates the Effect of the Spike Protein

Then, a second paper¹⁶ was published online March 8, 2021, investigated the potential that the spike protein is an inflammagen, or an irritant that can trigger inflammation at the cellular level. The researchers sought to determine if the spike protein was the underlying cause of the hypercoagulation found with a COVID-19 infection.

Mass spectrometry showed the spike protein damaged fibrinogen, prothrombin and complement 3, all compounds used in coagulation. They suggested that the presence of the protein was contributing to hypercoagulation and may result in large microclots that have been observed in plasma samples from patients infected with COVID-19.

Again, science demonstrated that it wasn't the virus causing endothelial damage that led to organ damage, such as was found in the heart, liver and kidney of COVID-19 patients. Rather, it was the spike protein that was also being injected in a genetic therapy shot program.

A third study published April 27, 2021, again demonstrated in an animal model that exposure to the spike protein alone was enough to induce severe lung damage.¹⁷ And yet, there was no move by governmental agencies to slow the distribution of this genetic experiment.

Researchers have continued to study how the spike protein affects the endothelial cells, and ultimately damages the heart muscle. A study published June 2021 in *Frontiers in Cardiovascular Medicine*¹⁸ demonstrated that the spike protein down regulates the expression of junctional proteins found in the arteries. They concluded:

“... these experiments reveal that Spike-induced degradation of endothelial junctional proteins affects endothelial barrier function and is the likely cause of vascular damage observed in COVID-19 affected individuals.”

Even as researchers identify the pathway the spike protein takes to damage the endothelial cells, it is patently ignored by the mainstream media, governmental agencies and many health experts who continue to push the public into vaccinating with a genetic therapy injection that does not effectively keep you from getting the disease or stop you from spreading the disease.

Infection Starts and May Stay in the Lungs

Interestingly, another study¹⁹ published in March 2021 questioned if the prevalence of inflammatory heart disease after COVID-19 infection in professional athletes would affect their ability to return to play.

The researchers evaluated 789 professional athletes who had COVID-19 and found no adverse cardiac events in those who underwent cardiac screening. In this group of healthy individuals, it appeared very rare for there to be systemic involvement of the spike protein.

However, in the VAERS reports September 3, 2021, there were a total of 11,793 individuals who suffered heart attack, myocarditis or pericarditis in the nine months that the vaccine had been administered.²⁰ The effect of COVID-19 on the heart is well documented.²¹

In my interview with Dr. Vladimir Zelenko²² in February 2021, we discussed the treatment of COVID-19 with hydroxychloroquine. At that point, Zelenko had treated 3,000 patients with symptoms of COVID-19 and only three of his high-risk patients had subsequently succumbed to the disease.

While the focus of the interview was on treatment protocols and the use of the antimalarial drug hydroxychloroquine, Zelenko shared an interesting statistic about his protocol. In the early months of COVID-19, Zelenko decided to treat his high-risk

patients as early as possible, without waiting for severe symptoms. This turned out to be one key to his significant success.

His understanding of the mechanism behind hydroxychloroquine and zinc led to using the combination alongside azithromycin, to prevent bacterial pneumonia and other bacterial infections common with COVID.

What is interesting are the statistics for Zelenko's patients with long haul symptoms. Data from the University of Washington in 2021 found 32.7% of outpatients with COVID-19 go on to experience persistent symptoms.^{23,24} However, Zelenko had treated 3,000 patients and none who received treatment within the first five days went on to develop long-haul symptoms. His data was from the same period as that of the University of Washington.

While he has had patients with persistent symptoms from COVID-19, they sought medical care after the first five days of symptoms, which meant the inflammatory process had advanced. From his experience, and the experience of the patients he treated, early intervention with the protocol nearly eliminated the risk of persistent symptoms.

Long Haul Symptoms May Be Related to Spike Damage

The symptoms that may last for weeks or months after a COVID-19 infection are referred to as long-haul symptoms. For some, this may be the result of vascular damage caused by the spike protein. The CDC²⁵ reports that a combination of the following symptoms without an active COVID infection can appear weeks after the infection and last for months.

Brain fog described as difficulty thinking or concentrating

Chest pain

Cough and difficulty breathing

Depression or anxiety

Dizziness when first

Fast beating heart or

	standing	pounding heart
Fatigue	Fever	Headache
Joint or muscle pain	Loss of smell or taste	Shortness of breath

Scientists now know that the predominant pathophysiology of COVID-19 includes endothelial damage and microvascular injury, stimulation of hyperinflammation and hypercoagulability.²⁶ A review in *Physiological Reports*²⁷ examined how the capillary damage and inflammation from endotheliitis triggered by COVID-19 could contribute to the persistent symptoms by interfering with tissue oxygenation.

The combined effects of capillary damage in multiple key organs may accelerate hypoxia-related inflammation and lead to long-haul symptoms. Unlike Zelenko's patients who did not have long-haul symptoms, participants in an online survey published in *EClinical Medicine* did not fare so well.²⁸

The study revealed data from 3,762 participants with suspected or confirmed COVID-19 in 56 countries. For the majority, it took greater than 35 weeks to recover from all their symptoms. The data showed that people experienced an average of 55.9 symptoms across 9.1 organ systems. The most frequent symptoms six months after infection were cognitive dysfunction, fatigue and post-exertional malaise.

List of Vaccine Side Effects Is Growing

As the list of people reporting adverse events after the vaccine continues to grow, social media platforms are working just as hard to suppress any information about the list of side effects people are experiencing.

In order to tell their stories, people are posting videos, still photos and evidence of their vaccine injury at *No More Silence*²⁹ and *1000 COVID Stories*.³⁰ One example is Sarah Green, a 16-year-old student who is experiencing debilitating symptoms. This is her story as told by her mother:³¹

“Within a few weeks, she developed a bad stutter and started experiencing uncontrollable head movements. She looked like someone who has Parkinson’s. She had never stuttered or had these tics before.

She was admitted to the hospital where she spent two nights and underwent numerous tests, before being discharged and told that it was a ‘nervous tic,’ and to see a mental health provider.

‘We asked several times if it could be the vaccine and we were ignored, until one doctor told us that he had no idea what it was, but it was ‘absolutely not the vaccine’ and we couldn’t blame everything on that.’

Her parents argued for a referral to see a neurologist, who diagnosed Sarah with Functional Movement Disorder, and told that it was “related to the vaccine, but not vaccine related.” They also said that it was an ‘extremely rare’ side effect, despite having seen several cases of it in their own practice over the past year.

Sarah had ended the last school year with a 4.7 GPA and was enrolled in an Early College program, on track to graduate with an Associates Degree. Given her current physical condition and limitations, she had no choice but to drop her college classes for this upcoming semester.

She has started her regular classes but has found it impossible to look down or write without triggering violent tremors and spasms. Her teacher will be typing her notes for her.

‘I am heartbroken because she has worked so hard and everything has changed for her – and I’m so damn mad! Our whole lives have changed, and for what what? A vaccine that doesn’t even work! My hope is that you, the reader, will be able to make an informed decision when deciding whether you get the vaccine or not. We were not afforded that opportunity.’”

It is crucial to report a vaccine injury or side effect to VAERS, as the data are essential in helping individuals, doctors and researchers make informed decisions. You can make your own report online or using a PDF by going to the Vaccine Adverse Event Reporting

System.³² You'll find more information about adverse events and how vaccines affect your health at the National Vaccine Information Center.³³

Sources and References

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