

https://www.theepochtimes.com/health/subclinical-heart-damage-more-prevalent-than-thought-after-moderna-vaccination-study-5423864?utm_source=share-btn-copylink

Subclinical Heart Damage More Prevalent Than Thought After Moderna Vaccination: Study

Jul 26 2023



A Swiss soldier fills up a syringe with Moderna Covid-19 vaccine in Delemont, northern Switzerland, on December 14, 2021. - Switzerland hit by a new wave of infections, like much of Europe, has called army in to speed up vaccination.

Damage to the heart is more common than thought after receipt of Moderna's COVID-19 booster, a [new study](#) indicates one in 35 health care workers at a Swiss hospital had signs of heart injury associated with the vaccine, mRNA-1273, researchers found. "mRNA-1273 booster vaccination-associated elevation of markers of myocardial injury occurred in about one out of 35 persons (2.8%), a greater incidence than estimated in meta-analyses of hospitalized cases with myocarditis (estimated incidence 0.0035%) after the second vaccination," the researchers wrote in the paper, published by the European Journal of Heart Failure. In a generally healthy population, the level would be about 1 percent, the researchers said.

The group experiencing the adverse effects was followed for only 30 days, and half still had unusually high levels of high-sensitivity cardiac troponin T, an indicator of subclinical heart damage, at follow-up.

The long-term implications of the study remain unclear as little research has tracked people over time with heart injury after messenger RNA vaccination, which is known to cause myocarditis and other forms of heart damage.

“According to current knowledge, the cardiac muscle can’t regenerate, or only to a very limited degree at best. So it’s possible that repeated booster vaccinations every year could cause moderate damage to the heart muscle cells,” University Hospital Basel professor Christian Muller, a cardiologist and the lead researcher, said in a statement. Moderna did not respond to a request for comment.

None of the patients experienced a major adverse cardiac event, such as heart failure, within 30 days of booster vaccination, and none had electrocardiogram changes. The people with elevated levels were advised to avoid strenuous exercise, which may have mitigated more serious problems, the researchers said. No imaging was done to examine the participants’ hearts, despite imaging being recommended by many cardiologists in cases of suspected vaccine-induced myocarditis. It’s possible that imaging would have revealed inflammation, which could cause scarring or irregular heartbeat, Dr. Andrew Bostom, a heart expert in the United States who was not involved in the research, told The Epoch Times. Dr. Anish Koka, an American cardiologist, said that the findings were “super useful to see how ‘cardioactive’ the booster is” but that it was hard to say how significant the elevated troponin levels were, particularly without a comparison to baseline levels. “There is really nothing clinically concerning at 30 days to report,” he said on Twitter.

Study Methods

Researchers posited that the incidence of vaccine-associated heart injury was more prevalent than previously thought following messenger RNA booster vaccination because of a lack of symptoms or mild symptoms.

They defined injury as a sharp increase in high-sensitivity cardiac troponin T on the third day after vaccination without evidence of an alternative cause. The levels of cardiac troponin had to hit the upper limit of normal, 8.9 nanograms per liter in women and 15.5 nanograms per liter in men.

All workers at the University Hospital Basel scheduled to receive a Moderna booster for the first time were offered a chance to participate in the study, unless they experienced a cardiac event or underwent heart surgery within 30 days of vaccination. The workers received a booster, which is half the dosage level of the primary series shots, from Dec. 10, 2021, to Feb. 10, 2022. The cohort ended up being 777 workers, including 540 females. The median age was 37 years.

Among the participants, 40 had elevated levels of cardiac troponin. Alternative causes were identified in 18. For the other 22, the researchers determined they had “vaccine-associated myocardial injury.” The median age of the 22 was 46. All but two were women, making the percentage of women with elevated levels higher than the percentage of men (3.7 percent versus 0.8 percent), which contrasts with most of the previous literature on vaccine-induced myocarditis. That could stem from women receiving a higher vaccine dose per body weight, the researchers said.

Baseline levels were not recorded because the hospital’s COVID-19 task force and the researchers decided that the study “should interfere as little as possible with the

motivation of the hospital staff to obtain the mRNA-1273 first booster vaccination and the logistics of booster vaccination itself.”

None of the people with elevated markers had a history of heart disease. While half experienced symptoms, most symptoms were nonspecific like fever. Two participants suffered from chest pain. And two, according to the Brighton Collaboration case definition, likely suffered myocarditis.

Testing was done for high-sensitivity cardiac troponin T because of its sensitivity.

“This marker is extremely sensitive—with other methods such as MRI we wouldn’t have been able to detect any damage to the cardiac muscle, as it only becomes visible once the damage there is about three to five times greater,” Dr. Muller said.

The researchers were not able to figure out the mechanism for the vaccine hurting the heart muscle.

The authors reported some conflicts of interest, including Dr. Muller reporting grants from drugmakers such as Novartis and Roche. The study was funded by the University of Basel and the University Hospital Basel.

Limitations include the lack of baseline levels and lack of imaging.

Previous Findings, and Pending Study

Several other prospective studies examine myocarditis following Pfizer vaccination.

In Thailand, researchers [found](#) that 29 percent of 301 adolescents developed cardiovascular effects, including chest pain, after a second Pfizer dose. Seven were diagnosed with heart inflammation.

Researchers in Taiwan established baseline electrocardiogram levels before a second Pfizer dose and [recorded](#) abnormal results following the administration in one percent of 4,928 primary school students. That included five students diagnosed with myocarditis or an abnormal heartbeat.

And an Israeli study of 324 health care workers with a median age of 51 who received a second Pfizer booster [identified](#) two cases of vaccine-induced heart injury on day three.

Other recent studies have confirmed that vaccine-induced myocarditis can kill, including a South Korean study that [ruled out](#) all other possible causes for eight sudden deaths following messenger RNA vaccination. Myocarditis was not suspected as a clinical diagnosis or cause of death before autopsies were performed, researchers said.

The Swiss researchers said more prospective studies are needed to examine post-vaccination heart injury. Long-term problems from the injuries, they stressed, remain unclear.

Moderna was required by U.S. authorities to conduct a prospective study to assess the incidence of subclinical myocarditis following a booster among adults, with a projected completion date of June 30, 2023. Neither the U.S. Food and Drug Administration (FDA) nor Moderna have disclosed the results of the study as of yet.

Pfizer was required to conduct a similar study, with results due on Dec. 31, 2022, but the FDA [changed](#) the end date at the request of Pfizer.