



## Myocarditis is more common after Covid-19 â??vaccinationsâ?? than after natural infections

### Description

### Our commentary on the study by Buergin et al. is now published

Sometimes you have to take detours to reach your destination. Ours now led to the *Egyptian Heart Journal*, which has just published [our commentary](#) on the [study by Buergin and colleagues](#) [1, 2].

I had previously [complimented the study by Buergin and colleagues](#) in August 2023. As a reminder: The authors conducted a careful observational study at the Basel Cantonal Hospital on all hospital staff who were willing to participate. These individuals were examined before and after the 1st booster â??vaccinationâ?? with the Moderna preparation mRNA-1273 to determine whether signs of myocarditis occurred. Troponin was measured for this purpose. This is a protein molecule that occurs in muscles. If it is measured in the blood, and at a higher concentration than in 99% of healthy people, then this â??together with other parameters â?? was considered a sign of myocarditis, an inflammation of the heart muscle. Measurements were taken 3 days after the â??vaccinationâ??. If there were signs of elevated troponin, other tests were carried out and possible other causes were excluded. This was done according to a strict protocol, and only when there were no other possible explanations was the myocarditis considered to be caused by the vaccination.

This was the case in 22 of 777 people examined, i.e. 2.8%. Elevated troponin was found in a total of 40 people, but alternative causes were identified in 18. Conservatively and robustly measured, in a group of prospectively observed people, 2.8 % therefore develop myocarditis after the â??vaccinationâ??., namely after the first booster. The authors hastened to add: none of the cases were severe; people were told to rest and were carefully followed up.

What made me and my colleague Rainer Klement reach for the keyboard was a paragraph in the discussion. There, the authors write: The figure of 2.8% myocarditis cases is relatively high, but it is much worse with a common infection.

I find that implausible. So I looked through the three references given there as evidence and realized: They all refer to hospitalized patients and in some of these publications it was stated that one could assume that the elevated troponin does not necessarily have anything to do with the infection, but was probably already there

before, as a sign of existing diseases.

We then went looking for studies in which troponin was measured in outpatients with Covid-19. We found a study from Poland [3]. There, elevated troponin was found in 1.8% of non-hospitalized and 7% of hospitalized Covid-19 patients.

If one also considers that relatively few patients in the population developed highly symptomatic Covid-19 disease with cardiac involvement, but that many people are vaccinated and therefore exposed to the risk of intervention-related myocarditis, then the argument of Buerger and colleagues no longer holds true. Firstly, because the figures for outpatients are different from those for hospitalized patients, and secondly, because many more people are vaccinated than fall ill.

We tried to send this simple fact in a very simple and short "Letter to the Editor" to the European Journal of Heart Failure, in which the original paper had appeared, relatively quickly after the online publication. And received an immediate rejection. It was not interesting enough.

To be able to classify this correctly, you need to know the "normal" scientific process. "Normally" the editor of a journal is not obliged, but is required by custom, to publish references to problems with a published paper as a letter, sometimes with abridgments, but normally something like this is published. First, the author receives it for comment, and then the letter and the author's response are published.

This is "normal". Because it is completely normal for authors to overlook something in their articles, or for something to be presented unclearly, or for peer reviewers to overlook something, or for peer reviewers to even insist that authors include something in their articles that they would not write on their own, but write under pressure from a reviewer so that the article is accepted. And if others, in this case us, then criticize a flawed line of thought, this is "usually" also published so that readers of the article become aware of it.

But we don't live in normal times, and all Covid-19 literature is politically biased. So the editor rejected our comment and we started looking for another platform. The *Egyptian Heart Journal*, the journal of Egyptian cardiologists, finally put the text through the review process again, which is why it took so long.

My colleague Rainer Klement was patient enough to incorporate all the reviewers' comments, make the text a little longer and add a statistical analysis. The core of the work has remained.

We have done the math: If you take the available percentage figures and extrapolate them to the number of all vaccinated people in Switzerland and Germany and calculate how many of them get myocarditis; if you also take the numbers of Covid-19 sufferers and work out how many of these are likely to have contracted myocarditis, then you find:

In Germany, 1.97 million people are likely to have contracted myocarditis as a side effect of vaccination (2.8% of all vaccinated people), in Switzerland just under 170,000. In Germany, 32,093 people who contracted Covid-19 are likely to have contracted myocarditis as a result of the infection (1.8% of all people who contracted the disease). In Switzerland, this figure is 8,175.

It is therefore wrong to say that significantly more people got myocarditis due to the infection than due to the "vaccination".

It is fair to say that this difference is not very noticeable in the two studies we used, Buerger et al and Niedziela et al. However, this is of course due to the fact that the difference between 2.8% with high troponin after "vaccination" (Buerger et al) and 1.8% with high troponin after natural infection (Niedziela et al) is not very

large and is not significant in the relatively small study cohorts. However, it does if the percentage figures are extrapolated to the population.

Relatively few people get sick through natural infection. Very many are vaccinated and therefore many more are exposed to the risk of myocarditis. For this reason, the argument in the discussion by Buergin and colleagues is definitely wrong: that the risk of myocarditis from natural disease is higher than from vaccination.

The risk of vaccination is particularly high for young, healthy people. This is because the majority of them have been vaccinated, but have a negligible risk of problems following a natural infection.

So it's true: In Germany, 60 times more people may have gotten myocarditis due to vaccination, in Switzerland 20 times more than due to natural infection (the difference comes from the fact that the vaccination rate was higher in Germany).

This estimate is also very shaky. Because it comes from the figures of just one systematic study, which was not particularly large. But at least it is a database. Right from the start, we should have done what many have called for: systematic and prospective observation.

We now know that Covid-19 vaccinations have a high risk of side effects and are therefore dangerous. We have shown: More people are likely to have been harmed because of the vaccinations, at least as far as myocarditis is concerned, than by the disease. That's why their drug approval should be withdrawn.

## Sources and literature

1. Klement RJ, Walach H. Commentary: raised c-troponin levels as a sign of myocardial injury after COVID-19 vaccination in healthy individuals are worrying. The Egyptian Heart Journal. 2024;76(1):16. doi: <https://doi.org/10.1186/s43044-024-00441-1>.
2. Buergin N, Lopez-Ayala P, Hirsiger JR, Mueller P, Median D, Glarner N, et al. Sex-specific differences in myocardial injury incidence after COVID-19 mRNA-1273 Booster Vaccination. European Journal of Heart Failure. 2023;25:1871-81. doi: <https://doi.org/10.1002/ejhf.2978>.
3. Niedziela JT, Glowacki J, Ochman M, Pudlo R, Adamczyk-Sowa M, Nososiejska-Wiewińska A, et al. Post-COVID-19 complications in hospitalized and nonhospitalized patients: the Silesian database of COVID-19 complications (SILCOV-19). Polish Archive of Internal Medicine. 2022;132:16233. doi: <https://doi.org/10.20452/pamw.16233>.

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