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Letter to Editor

**An autopsy case report of aortic dissection after mRNA COVID-19 vaccination: correspondence**

Dear Editor, we would like to share ideas on the publication “An autopsy case report of aortic dissection complicated with histiolymphocytic pericarditis and aortic inflammation after mRNA COVID-19 vaccination [1].” An autopsy revealed pericardial hemotamponade and ascending aorta dissection, according to Takahashi et al [1]. Microscopically, the pericardium was fibrously thick and the heart displayed a white villous surface, indicating pericarditis with a predominance of macrophage and lymphocyte infiltration [1]. These histological findings were in agreement with those of post-vaccination myocarditis, according to Takahashi et al. To the best of our knowledge, no cases of histopathologically confirmed pericarditis following COVID-19 vaccination have been documented, according to Takahashi et al. In the present case, prolonged aortic adventitia inflammation may have contributed to the aortic wall’s fragility and subsequent dissection [1].

Before collecting clinical data from the patient for vaccination, comorbidity must be eliminated. When addressing a specific instance that has a problem after receiving the COVID-19 vaccine, comorbidity may be an issue [2]. This normally isn’t an option if there is a post-vaccination clinical problem. The possibility of asymptomatic SARS-CoV-2 confounding remains. For instance, thrombohemostatic illness, a clinical condition that may coexist with dengue in a recipient of the vaccination, can be brought on by dengue [3]. An association between underlying genetic variation and the immunological response of vaccination recipients was found by a recent study [4]. The implications of the genetic variation background component should be assessed in any planned future research. Finally, Takahashi et al. may have claimed incorrectly that the current case report is the first histopathologically verified pericarditis following COVID-19 vaccination. This might not be the first case. The pericarditis after COVID-19 vaccination was already mentioned in a prior Singapore paper [5]. According to the report by Yeo et al. [5], 252 of the 6606 suspected cases of vaccine-related adverse effects that were recorded in Singapore as of June 30, 2021, were considered to be serious [5]. Yeo et al. noted that 12 occurrences of myocarditis and pericarditis and 42 incidences of anaphylaxis were documented [5]. Yet Yeo et al. omitted to provide the particular histological results in their detailed descriptions of the cases [5].

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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