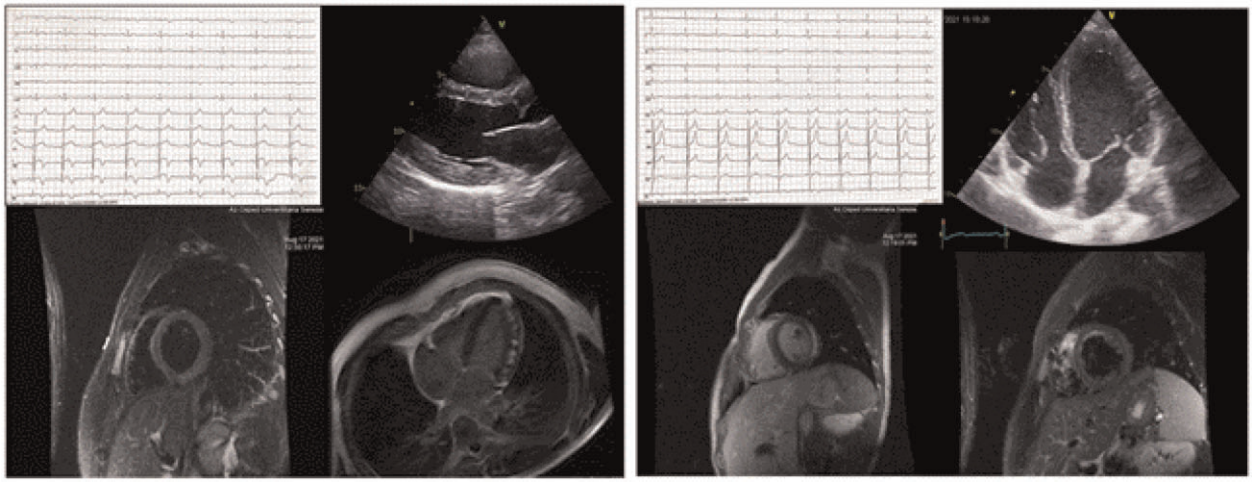
403 Acute myopericarditis after mRNA COVID-19 vaccine

Carlotta Sciaccaluga[1], Flavio D'Ascenzi[1], Matteo Cameli[1], Milena Gallotta[1], Daniele Menci[1], Giovanni Antonelli[1], Benedetta Banchi[2], Veronica Mochi[1], Serafina Valente[1], and Marta Focardi[1]
[1]Department of Medical Biotechnologies, Division of Cardiology, University of Siena, Italy, and [2]Unit of Diagnostic Imaging, University Hospital Santa Maria alle Scotte, Siena, Italy

Aims: Cases of myocarditis and myopericarditis after mRNA COVID-19 vaccines have been reported, especially after the second dose and in young males. Their course is generally benign, with symptoms onset after 24–72 h from the dose.
Methods and results: We report two cases of myopericarditis after the second dose of the mRNA-1273 COVID-19 vaccine in two young males, 20-years old and 21-years old. Both the patients were administered the vaccine on the same day. They both experienced fever on the same day of the vaccine and symptoms consistent with myopericarditis three days after the dose, which was confirmed by cardiac magnetic resonance. Figure 1 summarizes the main non-invasive findings that suggested and confirmed the diagnosis of acute myopericarditis. The disease course was benign in both patients, and only one patient presented rare ventricular arrhythmias on the admission day. They were both discharged on the 9th day of the in-hospital stay.
Conclusions: Myopericarditis is usually considered an uncommon adverse reaction after various vaccinations, reported also after the mRNA COVID-19 vaccine. Several explanations have been proposed, including an abnormal activation of the immune system leading to a pro-inflammatory cascade responsible for myocarditis development. The temporal aspect of these case reports is rather peculiar and it is useful to underscore that both vaccines belonged to the same batch of vaccines. However, despite these cases, vaccination against COVID-19 far outweighs the risk linked to COVID-19 infection and remains the best option to overcome this disease.



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