C89 A CASE OF MYOPERICARDITIS RECURRENCE AFTER THIRD DOSE OF BNT162B2 VACCINE AGAINST SARS-COV-2 IN A YOUNG SUBJECT: LINK OR CASUALITY?

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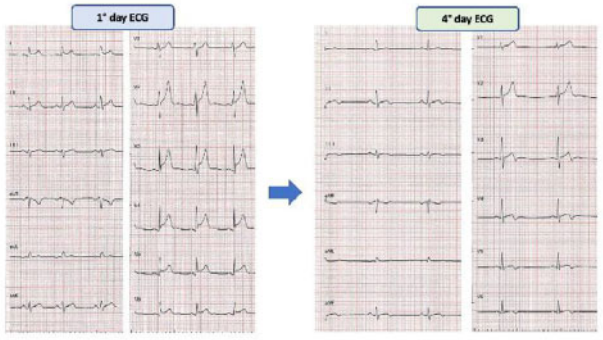
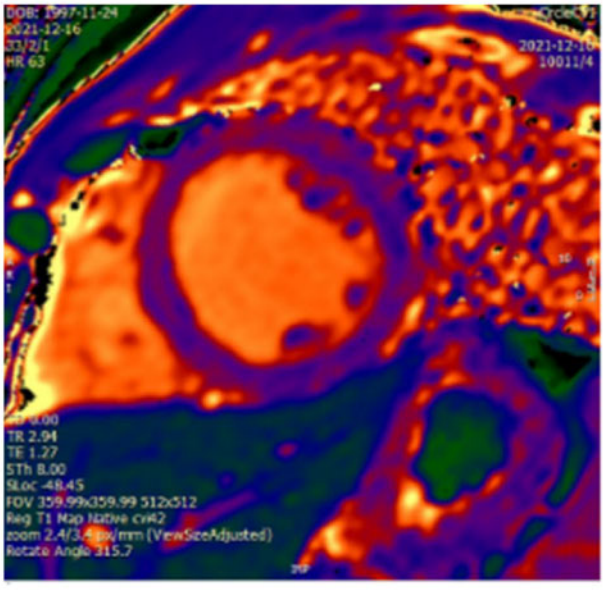
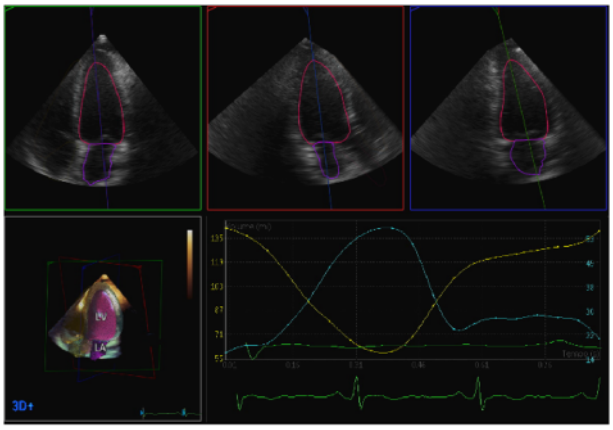
Background: The rate of post-vaccine myocarditis is being studied from the beginning of the massive vaccination campaign against Sars-Cov-2, reporting a very low incidence. Although a direct cause-effect relationship has been described, in most cases the vaccine pathophysiological role is doubtful. Moreover, it is not quite as clear as having had a previous myocarditis could be a risk factor for a post-vaccine disease relapse.
Case Presentation: A 27-year-old man presented to the ED for palpitations and pericardial chest pain radiated to the upper left limb, on the 4th day after the third dose of BNT162b2 vaccine. He experienced a previous myocarditis 3 years before, with full recovery and no other comorbidities. ECG showed a diffuse ST segment elevation and a cardiac echo showed lateral hypokinesia with preserved ejection fraction. Troponine-T was elevated (160ng/l), chest x-ray was normal, and the Sars-Cov-2 molecular buffer was negative. High-dose anti-inflammatory therapy with ibuprofen and colchicine was started; in the 3rd day high sensitivity Troponin I reached a peak (hsTnI) of 23000 ng/L. No heart failure or arrhythmias were observed. A cardiac MRI was performed showing normal biventricular systolic function, areas of LGE with non-ischemic subepicardial pattern at the level of the anterior wall with increased T2 signal, suggestive for a recurrence of myocarditis. A left ventricle electroanatomic voltage mapping was negative (both unipolar and bipolar), while the endomiocardial biopsy showed a picture consistent with active myocarditis. The patient was discharged in good shape, with normal hsTnI values on bisoprolol 1.25mg, ramipril 2.5mg, ibuprofen 600 mg three times a day, colchicine 0.5 mg twice a day. Discussion: We presented the case of a young man with history of previous myocarditis, admitted with a non-complicated acute myopericarditis relapse occurred 4 days after Sars-Cov-2 vaccination (3rd dose). Despite the observed very low incidence of cardiac complications following BNT162b2 administration, and the lack of a clear proof of a direct cause-effect relationship, we think that in our patient this link can be more than likely. In the probable need for additional Sars-Cov-2 vaccine doses in the next future, studies addressing the risk-benefit balance of this subset of patient are warranted.
Conclusion: We described a multidisciplinary management of a case of myocarditis recurrence after the third dose of Sars-Cov-2 BNT162b2 vaccine.



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