mrna-1273

A 44-year-old man developed acute myocarditis following vaccination with mrna-1273 for COVID-19.

The man presented with severe chest pain and dyspnoea. He had a history mild asthma, obesity and obstructive sleep apnoea. He was a former smoker. He had received second dose of mRNA-1273 SARS-COV-2 vaccine [Moderna] [*dose and route not stated*]four days earlier. Subsequently, after receiving vaccine he had headache, dry cough, myalgia and malaise. He was receiving albuterol and fluticasone-salmeterol. His ECG revealed ST-segment elevation, physical examination revealed minimal lower extremity swelling, angiogram revealed mild coronary artery disease, and left ventriculogram revealed mild reduction in ejection fraction (EF) along with elevated left ventricular end-diastolic pressure. Laboratory investigations revealed myocardial injury and systemic inflammation. His Chest X-ray revealed mild pulmonary oedema; transthoracic echocardiogram revealed enlarged left ventricle, reduced EF, generalised left ventricular hypokinesis, and decreased systolic function. Cardiac MRI was suggestive of acute myocarditis with patchy linear mid-myocardial enhancement of the septum and interior walls at the base to mid-ventricle, sub-epicardial/mid-myocardial enhancement of the lateral wall at the mid-ventricle and apical lateral wall. He also had myocardial oedema.

The patient received unspecified diuretics for congestion; ACE inhibitor and beta blocker therapy for systolic dysfunction. He also received colchicine for mild persistent chest pain, which resolved following 4-5 days after presentation. He was monitored for five days, he was stable and was discharged. A follow-up ECG after one month was normal. Thereafter, he remained off unspecified diuretics and asymptomatic.

Tailor PD, et al. Case report: Acute myocarditis following the second dose of mRNA-1273 SARS-CoV-2 vaccine. European Heart Journal - Case Reports 5: No. 8, Aug 2021. Available from: URL: http://doi.org/10.1093/ehjcr/ytab319 803609116