

COVID-19-Vaccine-Pfizer-BioNTech

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Cardiac tamponade, acute pericarditis and pericardial effusion: case report

A 18-year-old man developed acute pericarditis, pericardial effusion and cardiac tamponade following administration of COVID-19-Vaccine-Pfizer-BioNTech vaccine [*route, dosage and exact time to reaction onset not stated*].

The man had received first dose of COVID-19-Vaccine-Pfizer-BioNTech [Pfizer-BioNTech COVID-19 vaccine]. Three weeks later, he presented to the emergency department with fever, pleuritic chest pain and shortness of breath. His temperature was noted to be 37.94°C and his HR was found to be 111 beats/minute. He had regular tachycardia. Electrocardiogram revealed diffuse ST elevations and PR depressions, suggesting acute pericarditis.

The man was started on ibuprofen, and he was discharged. After 3 days later, he had persistent chest pain, requiring colchicine therapy. About 10 days later, he again presented to the emergency department with ongoing fever, shortness of breath, pleuritic chest pain and dizziness. Vital signs were notable for an elevated temperature, tachycardia and tachypnoea. ECG showed persistent diffuse ST elevations. Chest x-ray revealed an enlarged cardiac silhouette. Echocardiogram indicated a large pericardial effusion with early tamponade, including right atrial diastolic collapse and a dilated inferior vena cava. He was then admitted to the ICU, where he underwent emergent pericardiocentesis. The pericardial fluid analysis was consistent with an exudative process. Four days later, he was discharged on colchicine and indometacin [indomethacin]. After 1 week, he was readmitted to hospital with persistent tachycardia and recurrent pericardial effusion. He was started on ketorolac and methylprednisolone. Following this, his condition improved. Subsequently, he was discharged on prednisone and celecoxib therapy.

Hryniewicki AT, et al. Cardiac Tamponade After COVID-19 Vaccination. *Journal of Emergency Medicine* 62: 250-253, No. 2, Feb 2022. Available from: URL: <http://doi.org/10.1016/j.jemermed.2021.10.008>

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