

## mRNA-1273

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### Multisystem inflammatory syndrome: case report

A 37-year-old woman developed multisystem inflammatory syndrome following treatment with mRNA-1273 vaccine for COVID-19.

The woman received first dose of mRNA-1273 [Modern mRNA vaccine] on April 2021. However, two weeks later she presented with fever and mild non-productive cough. Eventually, she tested positive for COVID-19. After resolving her condition, she received second dose of mRNA-1273 [*dosage and route not stated*]. Ten days later, she presented with fever, significant neck pains, chills, mild dyspnoea and residual cough. During admission, her initial signs included pulse rate of 115 beats per minute, BP 97/58mm Hg, RR 21 breaths per minute with oxygen saturation of 95% and oral temperature of 39°C. Her physical examination was alert, oriented and conscious. Examination of neck showed multiple tenders right sided cervical and axillary lymphadenopathy and her chest was clear to auscultation and heart sounds should only tachycardia. Her blood tests showed lymphopenia, elevated WBC and inflammatory markers levels. A CT pulmonary angiogram showed bilateral pulmonary ground glass and consolidative changes with accompanied splenomegaly attributed to the recent disease (COVID-19). She was initiated on piperacillin/tazobactam and azithromycin. However, her condition deteriorated. She was admitted to critical care with hypotension and was kept on vasopressor support. Further, her repeat laboratory parameters, showed elevated inflammatory parameters. The echocardiography showed moderately reduced left ventricular function and global hypokinesia evaluated as sepsis, which related to myocarditis. However, her condition remained persisted. Based on all these clinical findings, she was diagnosed with multisystem inflammatory syndrome (MIS) secondary to mRNA-1273 vaccine.

The woman was treated with methylprednisolone. Subsequently, an improvement was noted and discharged from hospital. A follow-up CT angiography showed no evidence of coronary artery disease and MRI showed no evidence of myocarditis.

Al Bishawi A, et al. Beware of the ambiguous enemy of multisystem inflammatory syndrome in adult (MIS-A) following Covid-19 infection or vaccination. *Clinical Case Reports* 9: 3323-3325, No. 11, Nov 2021. Available from: URL: <http://doi.org/10.1002/ccr3.5138> 803627605