

# Case series reports myocarditis after second dose of COVID-19 vaccine

June 8 2021

---



In a case series published online June 7 in *Pediatrics*, the authors present

seven cases of acute myocarditis or myopericarditis in healthy male adolescents within four days of receiving the second dose of the Pfizer-BioNTech COVID-19 vaccination.

Mayme Marshall, M.D., from the Oregon Health and Science University School of Medicine in Portland, and colleagues detail seven cases of acute myocarditis or myopericarditis in healthy male adolescents presenting with [chest pain](#) within four days following the second dose of the Pfizer-BioNTech COVID-19 vaccine.

According to the authors, around the time of presentation, five of the [patients](#) had fever. In all seven cases, acute COVID-19 was ruled out by real-time reverse transcription polymerase chain reaction tests of nasopharyngeal specimens. No patient met the criteria for multisystem inflammatory syndrome in children. Negative severe acute respiratory syndrome coronavirus 2 nucleocapsid antibody assays were obtained for six patients, indicating no prior infection. Elevated troponin was seen in all patients; late gadolinium enhancement characteristic of myocarditis was seen in [cardiac magnetic resonance](#) imaging. Symptoms resolved quickly for all seven patients. Three were only treated with nonsteroidal anti-inflammatory drugs, and four received intravenous immune globulin and corticosteroids.

"While we await more definitive data regarding the nature of the relationship between the Pfizer/BioNTech vaccine and myocarditis, there are some concerns regarding this case series that might suggest a [causal relationship](#) and therefore warrant further analysis through established surveillance systems," write the authors of an accompanying editorial.

One author of the editorial disclosed involvement in Pfizer COVID-19 vaccine clinical trials.

**More information:** [Abstract/Full Text \(subscription or payment may be required\)](#)  
[Editorial \(subscription or payment may be required\)](#)

Copyright © 2021 [HealthDay](#). All rights reserved.

Citation: Case series reports myocarditis after second dose of COVID-19 vaccine (2021, June 8)  
retrieved 2 February 2023 from  
<https://medicalxpress.com/news/2021-06-case-series-myocarditis-dose-covid-.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.