

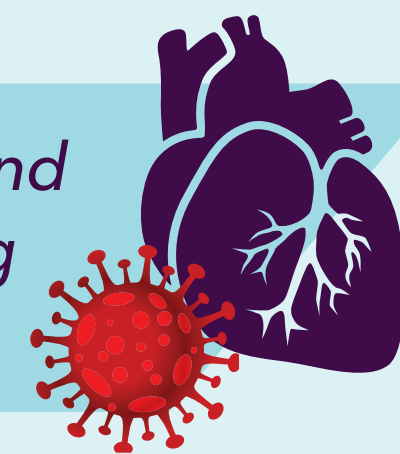
CARDIOVASCULAR SEQUELAE OF COVID-19 IN ADULTS: Myocarditis and Other Myocardial Involvement



AMERICAN COLLEGE of CARDIOLOGY®

Goals

Support clinician and patient decision-making surrounding the evaluation, diagnosis, and management for those with suspected myocarditis or myocardial involvement following SARS-COV-2 infection as well as COVID-19 mRNA vaccination.

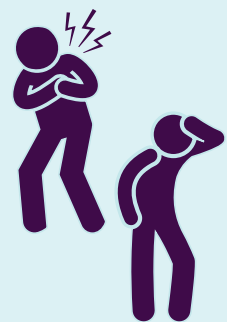


Definitions and Clinical Presentation

Post-COVID Cardiac Involvement is suspected in a patient with new or worsening cardiac symptoms triggered by or in the aftermath of COVID infection.

Cardiac symptoms

- Chest pain
- Exertional dyspnea
- Palpitations
- Excessive sinus tachycardia at rest or minimal exertion
- Postexercise malaise, fatigue



The possible underlying pathophysiology to consider:

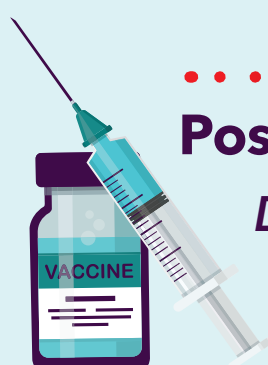
Myocarditis

- As a result of cardiotropic viral injury (rare)
 - Elevated cTn
 - Abnormal electrocardiographic, echocardiographic, CMR, and/or histopathological findings on biopsy or postmortem evaluation in the absence of flow-limiting coronary artery disease
- Myocardial involvement
 - Includes myocardial abnormalities noted to occur in the setting of SARS-CoV-2 infection that do not meet myocarditis criteria
- Myocardial injury
 - cTn level above the 99th percentile upper reference limit
 - Myocardial injury with COVID-19 carries a worse prognosis

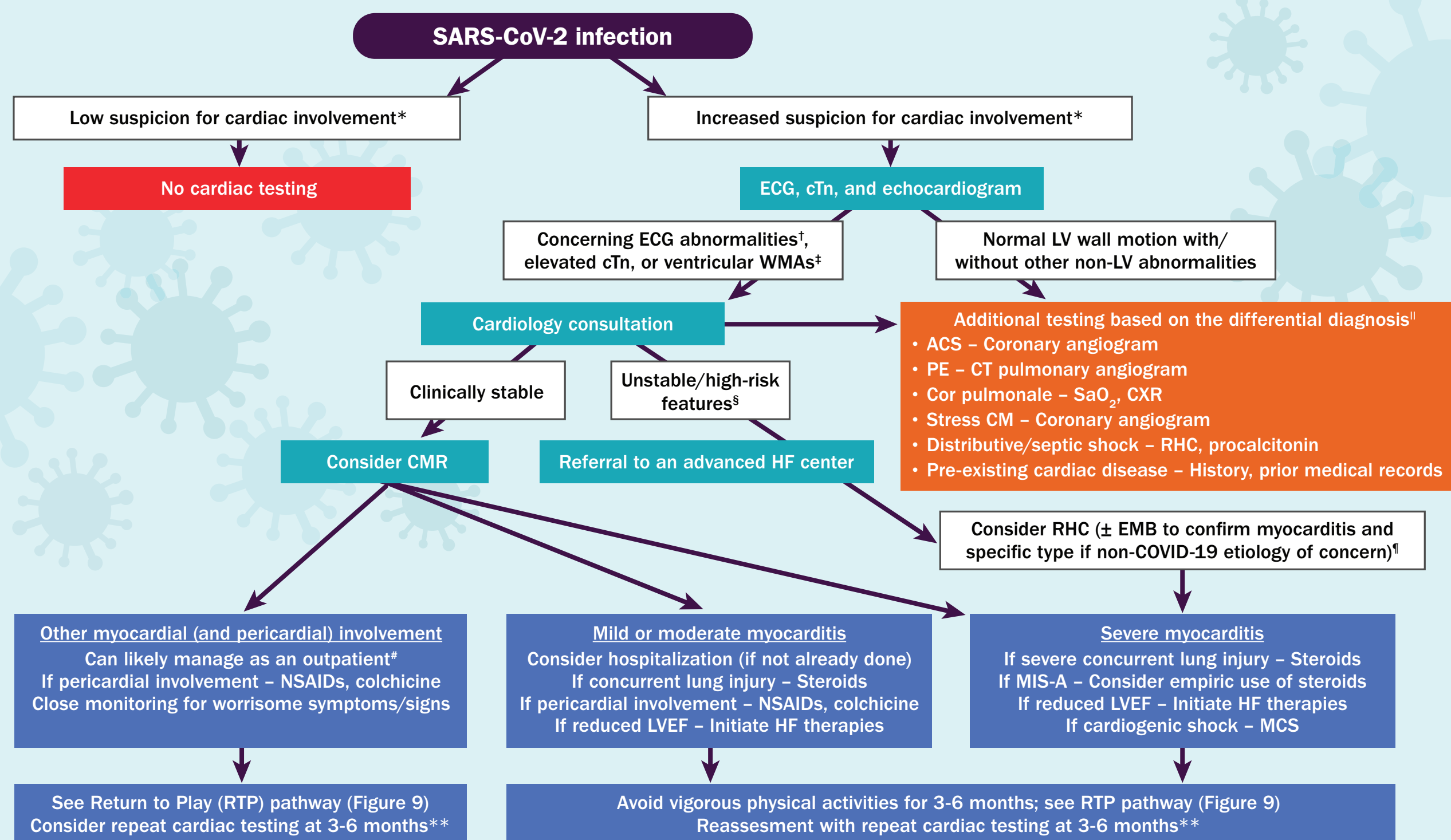


Post-vaccination Myocarditis

Data from the U.S. Vaccine Adverse Event Reporting System suggest that myocarditis following COVID-19 mRNA vaccination is rare. A very favorable benefit-to-risk ratio exists with the COVID-19 vaccine for all age and sex groups evaluated thus far.



Evaluation and Management of Patients With Suspected Myocarditis or Myocardial Involvement



Please refer to the manuscript for footnote information. Please note, for pericardial involvement, low-dose corticosteroids are also reasonable.



Figure 9: Evaluation of the Athletic Patient Convalesced From COVID-19 and Guidance on RTP and/or Intense Training



Reference: 2022 ACC Expert Consensus Decision Pathway on Cardiovascular Sequelae of COVID-19 in Adults: Myocarditis and Other Myocardial Involvement, Post-Acute Sequelae of SARS-CoV-2 Infection, and Return to Play (jacc.org)