Return to Play after COVID-19 Infection

Since the emergence of the novel SARS-Coronavirus-2 (COVID-19), public health guidelines expectedly have been changing and adapting to the better understanding of the virus with time. Guidance on the graded re-introduction to recreational play and competitive sports have been released.1,2 However, questions still remain on the safety of returning to exercise in those with prior exposure/infection with COVID-19. Furthermore, COVID-19 infections in pediatric patients are more likely to be asymptomatic or mild compared to adult patients.3,4 Hence, with the schools and colleges re-opening, the pediatrician is left with the conundrum of clearance for sports participation.

Thankfully, children <12 years of age in general do not have exertional levels in sports much higher than their daily activities. Most pediatric patients will be able to be easily cleared for participation without extensive cardiac testing, but pediatric providers should ensure patients have fully recovered and have no evidence of myocardial injury.

The algorithm suggested below should serve as a guide to the pediatrician in approaching pediatric patients with a history of COVID-19 infection who want to return to physical activity and sports participation.

Please call 901-287-5092 for appointments.

Please feel free to call me with any specific patient questions or concerns. (Ranjit Philip: 423-741-6330; Jason Johnson: 919-308-3887)
Return to Play After COVID-19 Infection – Algorithm for the Pediatrician

- History of COVID-19 Infection and Currently Asymptomatic for >14 days
  - History of Asymptomatic/Mild Symptoms (no fever/<3 days of symptoms)
    - Rest/no exercise for 2 wks from positive test result
    - CLEAR FOR PARTICIPATION: Slow resumption of activity after 2 weeks from positive test result
  - History of Moderate Symptoms (prolonged fevers & bedrest, no hospitalization, no abnormal cardiac testing)
  - History of Severe Symptoms or Specific Cardiac Symptoms (hospitalized, abnormal cardiac testing, multisystem inflammatory syndrome in children (MIS-C), cardiac symptoms (chest pain, syncope, palpitations)
    - Age <12 years old
      - Age >12 years old, high intensity sports participation or physical activity
    - If Normal
      - ECG* prior to participation
      - If Abnormal
    - REFERRAL TO PEDIATRIC CARDIOLOGY for testing and Clearance

*If there is no availability of ECG, referral can be made to pediatric cardiology. Unique patients and situations may warrant referral to pediatric cardiology that may not be included in the algorithm.

Exercise and Athletics in the COVID-19 Pandemic Era
Return to Play After COVID-19 Infection – Written Algorithm for the Pediatrician

If the child did NOT have symptoms:

• should not return to sports until 14 days after receiving their COVID-19 test results.

If the child had a mild illness (i.e., they did not have a fever and symptoms lasted less than three days):

• should not return to sports until at least 14 days after their COVID-19 symptoms have resolved.

If the child had a moderate illness (i.e., their fever or other symptoms lasted for more than three days, but they were not sick enough to be hospitalized):

• should not return to sports until at least 14 days after their COVID-19 symptoms have resolved.
• If 12 or older, ECG should be performed before they return to sports. (If not available, may refer to cardiology for ECG). If ECG abnormal, refer to pediatric cardiology.

If the child was hospitalized or had cardiac symptoms (chest pain, palpitations, syncope):

• should not return to sports until at least 14 days after their COVID-19 symptoms have resolved.
• should have cardiac testing (referral to pediatric cardiology) before they return to sports
References:


2 Dean P, Jackson L, Paridon S. Returning To Play After Coronavirus Infection: Pediatric Cardiologists' Perspective. JACC 2020/07/13/
