

World Health Day 2021: Why children who suffered from COVID-19 are vulnerable to myocarditis

Myocarditis is a heart condition that refers to an inflammation of the heart muscle known as the myocardium — the muscular layer of the heart wall

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The fear of myocarditis in children affected by COVID-19 is high.

SARS COV-2 virus has been a global threat and an unmatched challenge for the healthcare community across the globe for the last one and a half years. It has taken away many lives, especially the lives of those people who were already dealing with co-morbidity issues like diabetes or hypertension.

[COVID-19](#) has worked as a severe catalyst for inducing heart and lung issues and there are some cases of myocarditis disease is reported even post- [COVID-19](#) vaccination. However, this was only reported after the mRNA vaccine shots (Pfizer-BioNTech or Moderna) and especially in male adolescents and young adults.

The symptoms were visible usually several days after the vaccination and the majority of cases were observed after the second dose of vaccine. Myocarditis is a heart condition that refers to an inflammation of the heart muscle known as the myocardium — the muscular layer of the heart wall. The inflammation is probably going to scale back the heart's ability to pump and end in rapid or abnormal heart rhythms (Arrhythmias).

Across all ages, people who were infected with [COVID-19](#) were at a 16 times higher probability of developing myocarditis compared to those who aren't infected. The direct association between [COVID-19](#) and myocarditis has not been identified yet, multiple theories are currently being studied around the same.

However, research suggests the risk of myocarditis is 37 times higher for COVID-infected children who are under 16 years of age and seven times higher for infected people within the age bracket of 17-39 compared to their uninfected counterparts.

Some of the myocarditis cases have been observed in children with [COVID-19](#) and that could also be the effect of the multisystem inflammatory syndrome (MIS). The risk of developing heart inflammation was found to be around 3 to 17 per million healthy 12- to 15-year-olds after a first jab and 12 to 34 per million after the second shot. Cases of myocarditis following vaccination were resolved quite easily within a very short span of time.

As [COVID-19](#) has affected heart health to a significant level, some cases of myocarditis have been reported. Often, the actual cause of myocarditis isn't identified.

Apart from [COVID-19](#), some other existing ailments like hypertension and cholesterol can worsen the condition. Some of the risk factors for myocarditis include excessive stress, obesity, and a family history of cardiac diseases. Some of the signs and symptoms should be watched out carefully and a doctor should be consulted immediately whenever someone is having mild to severe chest pain, unexplained fatigue, shortness of breath, fluid buildup with swelling of the legs, ankles, and feet, and rapid or irregular heartbeats.

When myocarditis is severe, it weakens the heart so that the rest of the body doesn't get adequate blood. In some cases, blood clots can be seen in the heart that leads to a stroke or heart attack.

There's no particular prevention for myocarditis. However, being aware of the disease can help in taking prompt actions after the symptoms are observed.

Experts recommend staying away from people who have a viral or flu-like illness until they've recovered and self-isolating if symptoms are seen, in order to protect others.

Following good hygiene can help prevent spreading illness.

Stay up to date on the recommended vaccines

Avoid both active and passive smoking and consumption of tobacco

Taking out at least 30 minutes time daily for exercise is a must to stay healthy

As obesity increases the probability of having heart disease, maintaining a healthy weight should be taken as a priority

There is a need to follow a balanced and healthy diet

Screening of heart health every 6 months should be done, especially after recovering from COVID.

Reduce and manage stress can be helpful

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