COVID-19 and its Impact on the Heart

When COVID-19 first made its way onto the American shore, it was mainly viewed as a devastating respiratory disease. Ventilator shortages made headlines. Patients described symptoms like difficulty breathing, or feeling like they were choking.

However, as we learn more about COVID-19 and its lasting effects on the body, the more we understand that despite the fact the virus is often initially inhaled, it impacts so much more than our lungs.

"I think the initial recognition of what this virus is, the mode of entry kind of made us focus more toward the lungs, but it really does affect a lot of the heart as well," explained Dr. Chetan Bhardwaj, cardiologist, OSF HealthCare Cardiovascular Institute.

Dr. Bhardwaj says case studies of COVID-19 patients have shown increased incidents of heart attacks; myocarditis (bruising of the heart); heart failure; or even cardiogenic shock, a condition in which your heart suddenly can't pump enough blood to meet your body's needs, which is usually caused by a severe heart attack.

"COVID 19 has effects on the heart," he warned. "It is one of these viruses that we've learned to describe as cardiotropic, so it has an affinity to attack the heart. There are receptors where these viruses go and attach so that they can attack the cells, and those receptors are present in the heart."

In a recent <u>study</u> published in *JAMA Cardiology*, researchers evaluated the heart tissue from 39 people in Germany who had recently died from COVID-19,-and found the virus was present in the hearts of 24 of them – more than 61% of these patients.

Dr. Bhardwaj says it appears patients who have heart complications due to COVID-19 have a more difficult time recovering.

"The heart gets affected somewhat more in the later stage of the disease, and people that have their hearts afflicted with this virus, in the literature at least, are shown to be very bad in terms of prognosis. They tend to have a much worse outcome and clinical course," said Dr. Bhardwaj.

While new studies are underway and more information is learned daily, there is still so much unknown about COVID-19 and its lasting effects on those infected.

Dr. Bhardwaj says the best thing we can do is to take all recommended safety precautions seriously and practice prevention.

Currently the Centers for Disease Control and Prevention (CDC) recommends washing hands often, avoiding close contact with people living outside of your household, and wearing a mask in public settings and when around people who don't live in your household.

"If you have preexisting heart conditions, if you have preexisting diabetes, hypertension, immunosuppression, you are at a higher risk of a bad outcome with this virus. Do everything that the CDC recommends. This should be standard practice now, and it shouldn't be debatable," said Dr. Bhardwaj.

For more information on COVID-19, including frequently asked questions, visit the OSF HealthCare COVID-19 digital health hub: www.osfhealthcare.org/covid19/.

If you are experiencing COVID-19 symptoms and it is not an emergency, use one of the digital care options offered by OSF. You can connect through Clare, a digital assistant available through the OSF website, or by calling the 24/7 nurse hotline at 833-OSF-KNOW (833-673-5669).