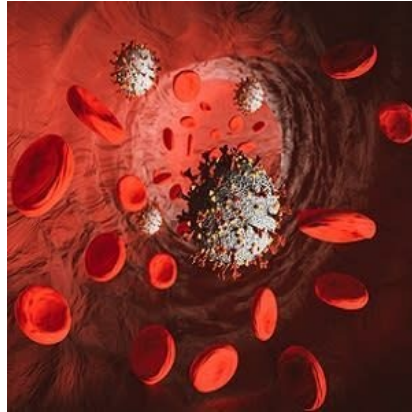




## Cardiac Arrest in COVID-19 - Characteristics and Outcomes



A recent report evaluates the characteristics and outcomes among cardiac arrest cases with COVID-19 and the differences between out-of-hospital cardiac arrests (OHCA) and in-hospital cardiac arrest (IHCA) during the pre-pandemic and the pandemic period.

Several reports demonstrate an increased risk of OHCA during the pandemic. A study from Paris reports a two-fold increase in OHCA incidence and a reduction in survival. Resuscitation attempts tripled in New York during the pandemic. A similar increase in OHCA has been reported in Italy. COVID-19 is primarily a respiratory infection, but there are studies that demonstrate cardiovascular complications in COVID-19 patients. Pre-existing cardiovascular conditions are a predictor of survival in COVID-19.

The study included all patients reported to the Swedish Registry for Cardiopulmonary Resuscitation from January to July 2020. March was defined as the start of the pandemic. This report is the first of its kind to detail characteristics and outcomes in COVID-19 patients suffering cardiac arrest.

The researchers assessed overall and 30-day mortality. One thousand nine hundred sixty-four cases of OHCA and 1080 cases of IHCA were studied during this period. The mean age for OHCA was 70.2 years and for IHCA 68.9 years.

During the pandemic, 10% of OHCAs and 16.1% of IHCAs had ongoing COVID-19. With regards to OHCA, the odds ratio for 30-day mortality in COVID-19 cases compared with non-COVID-19 cases was 3.4. 30-day survival for patients with COVID-19 was 4.7%, and for patients, without COVID-19 it was 9.8%. 30-day survival pre-pandemic was 7.6%. For IHCA, the odds ratio for COVID-19 positive cases compared to non-COVID-19 cases was 2.27. 30-day survival was 23.1% in COVID-19 patients versus 39.5% in non-COVID-19 patients. 30-day survival during the pre-pandemic period was 36.4%. No patient with COVID-19 has been discharged alive after suffering an OHCA (at the time that this report was published). In comparison, 36% of cases without COVID-19 who were hospitalised were discharged alive.

Cardiac arrest is a serious complication of COVID-19. Cardiac arrest and COVID-19 can be a lethal combination

Overall, these findings show that COVID-19 was involved in at least 10% of OHCA and 16% of all IHCA during the pandemic period. 30-day mortality among COVID-19 cases was increased 3.4 fold in OHCA and 2.3 fold in IHCA. Therefore, cardiac arrest is a serious complication of COVID-19. Cardiac arrest and COVID-19 can be a lethal combination. Patients with pre-existing cardiovascular conditions and COVID-19 must be closely monitored to prevent the development of cardiac arrest.

Source: [European Heart Journal](#)

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Published on : Tue, 23 Feb 2021