
Abstracts

□ ASSESSMENT OF THE FREQUENCY AND VARIETY OF PERSISTENT SYMPTOMS AMONG PATIENTS WITH COVID-19

Nasserie T, Huttler M, Goodman S, et al.

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COVID-19 infection is associated with many persistent symptoms, although these are not clearly defined. Much of the research and infection control protocols are aimed towards protecting older, immunocompromised, and other at-risk populations. However, understanding how COVID-19 affects a more generalized population will have important implications for patient care and outcomes even after the pandemic concludes.

This systematic review used PubMed and Web of Science to gather articles that assessed the prevalence of persistent symptoms in COVID-19 patients. Persistent symptoms were defined as those lasting 60 or more days after infection or 30 or more days after recovery. The articles were selected with an inclusion criterion, which required a clearly defined time zero and appropriate follow up. The authors then extracted data from the eligible articles, which included patient demographics and outcomes. The quality of the data was assessed using 6 criteria from the National Institutes of Health Quality Assessment Tool for Observational and Cohort Studies. A descriptive statistical analysis was used due to the heterogeneity of the study designs.

Out of the 1974 studies identified, 45 were included in the review. Thirty-three studies included either inpatients or outpatients, whereas 10 studies included both. The time zeros varied widely and were defined as symptom onset, hospital admission, hospital discharge, or infection recovery. Follow up times and summary statistics also varied greatly. The outcomes studied included measures of quality of life and radiographic findings; they were measured using standardized questionnaires and scales. The quality of the evidence was graded as moderate or low quality for the majority of studies. The most often missing quality measures were high rate of attrition, and, to a lesser degree, low frequency of repeated outcome measurements and baseline severity illness. The most common persistent symptoms reported were dyspnea (36%), fatigue (40%), cough (16.9%), depression (14.9%), anxiety (22.1%), anosmia, ageusia, and chest pain (13.1%). Dyspnea and fatigue were measured using validated instruments. Cognitive outcomes such as loss of memory or difficulty concentrating were also reported.

This study suggested that persistent symptoms following COVID-19 infection were very common, as 72.5% of patients reported at least 1 symptom. This finding was even more prevalent in patients with longer follow up periods and could poten-

tially impact health policy post-pandemic. The most common symptoms were fatigue, dyspnea, atypical chest pain, and various brain abnormalities, all of which can have a significant impact on quality of life. Additionally, young age did not appear to be protective against persistent symptoms. This study had several limitations, namely the heterogeneity and lower quality of the included articles. In order to better define the duration, frequency, and severity of persistent symptoms, future studies with more standardized methods will need to be conducted.

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Comment: This review suggests that COVID-19 patients may have persistent symptoms that will negatively impact their quality of life long after the acute phase of the infection. The research concerning this subject is limited at this time, and more standardized studies will need to be completed. As emergency physicians, we are very likely to encounter one or many of these symptoms in patients recovering from COVID-19 infection. Understanding the breadth of potential long-standing symptoms and seemingly unpredictable nature of them, while frustrating, may allow us to tailor the workup and counseling of patients accordingly.

□ ANGIOGRAPHY AFTER OUT-OF-HOSPITAL CARDIAC ARREST WITHOUT ST-SEGMENT ELEVATION

Desch, S., Freund, A., Akin, I., et al.

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It is well established that early revascularization in acute myocardial infarction is beneficial in preventing long-term myocardial damage and associated sequelae. In cardiac-related out of hospital arrests, an estimated 60% are due to acute coronary syndrome (ACS). For patients without ST elevation the differential for arrest is broad and includes cardiac etiologies such as non-ST elevation ACS and non-cardiac causes. Non-ST elevation ACS may have a delay in diagnosis in the absence of emergent angiography and any indicated revascularization. Previous research had looked at early revascularization in arrest without ST-elevation and had found no survival benefit between the two groups however they did not consider patients without shockable rhythm.