Annals of Internal Medicine

SPECIAL ARTICLE

Care of Patients With New, Continuing, or Recurring Symptoms After Acute SARS-CoV-2 Infection

A s the pandemic of acute SARS-CoV-2 infection con tinues, there is another pandemic that shadows it the growing population of people who have new, continuing, or recurring symptoms long after initial infection. Many refer to this condition as "long COVID," and the National Institutes of Health's (NIH) official name for the condition is postacute sequelae of SARS-CoV-2 (PASC). Whatever we call it, the current limited understanding of the pathophysiology, epidemiology, and course of this condition makes caring for these patients a vexing challenge.

To provide practical guidance for clinicians based on current knowledge, the Annals of Internal Medicine and the American College of Physicians held their ninth COVID-19 forum on 24 May 2022. The topic of this program was evaluation and management of patients with persisting symptoms after acute infection with SARS-CoV-2. Panelists included Dr. H. Clifford Lane, the Director for Clinical Research and Special Projects at the National Institute of Allergy and Infectious Diseases; Dr. Carlos del Rio, Distinguished Professor of Medicine in the Division of Infectious Diseases at Emory University School of Medicine and Executive Associate Dean for Emory at Grady; Dr. Aluko Hope, Associate Professor of Pulmonary and Critical Care and Medical Director of Oregon Health & Science University's Long COVID-19 Program; and Dr. Lindsay Lief, Associate Professor of Medicine at Weill Cornell Medicine/New York Presbyterian Hospital and Director of the Weill Cornell Post-ICU Recovery Clinic. Dr. Elisa Choi, Chair of ACP's Board of Governors and a practicing physician and educator board-certified in internal medicine and infectious diseases, moderated the program. Video of this program and the 8 previous ones are available at Annals.org.

The program began with Dr. Lane summarizing the results of a study he and colleagues just published in *Annals* that attempted to characterize the sequelae after recovery from COVID-19 in a cohort of survivors and controls. All participants had the same evaluations regardless of presence or absence of symptoms, including physical examination, laboratory tests and questionnaires, cognitive function testing, and cardiopulmonary evaluation (1). A subset also had exploratory immunologic and virologic evaluations. The study documented a high burden of persistent symptoms in persons after COVID-19, but it revealed no specific cause of reported symptoms in most cases and highly variable antibody levels after COVID-19. The study is ongoing and is continuing to recruit participants (ClinicalTrials.gov: NCT04411147).

After presentation of this recent study, Dr. Choi presented 3 clinical scenarios involving patients concerned about long COVID, with attendees completing a poll indicating what they would do in these situations. Panelists then reviewed these responses and discussed what they would do and why. This exercise highlighted large gaps in available evidence and a current absence of an accepted, definitive best strategy when caring for patients with persisting symptoms after COVID-19. Recurrent themes included the need to rule out other causes of symptoms; avoiding potentially harmful therapies, such as systemic corticosteroids, unless there is a specific indication for trying them; acknowledging that batteries of unfocused testing were unlikely to be clinically helpful; and affirming that vaccination is the most effective strategy for reducing the risk for acute infection and thus the risk for persisting sequelae.

Next, panelists addressed questions that attendees submitted when they registered for the program. Similar themes emerged in the responses to these questions as in the discussion of the clinical vignettes. Additional points that arose repeatedly in the discussion were the importance of validating patients' symptoms; exploring the social context of patients' symptoms; addressing misinformation about long COVID that patients may be receiving; and aiming to avoid harm from testing, specialty referral, or treatment not specifically targeted at the patient's individual presentation. Panelists also noted the potential value of occupational, cognitive, and physical rehabilitation to help mitigate symptoms. All expressed hope that the NIH's RECOVER initiative, created to learn about the long-term effects of COVID, will help to answer many unanswered questions about PASC and, when feasible, encouraged attendees to consider referring patients to RECOVER sites to help in this knowledge generation.

Panelists mentioned the following resources as trustworthy sources of information to help in the care of patients with PASC:

Centers for Disease Control and Prevention resources on long COVID: www.cdc.gov/coronavirus/2019-ncov/long-term-effects/index.html

RECOVER Initiative information on sites and ongoing studies: https://recovercovid.org/

General information on dysautonomia, which can occur after COVID-19, from Dysautonomia International: www.dysautonomiainternational.org/index.php

See also:

Web-Only Video: COVID-19 Forum IX CME/MOC activity

This article was published at Annals.org on 27 May 2022.

Information from the U.S. Department of Health and Human Services on disability and long COVID: www.hhs. gov/civil-rights/for-providers/civil-rights-covid19/guidancelong-covid-disability/index.html

As Dr. Hope eloquently stated in an editorial he wrote to accompany the NIH report that Dr. Lane summarized at the start of the program, we must painstakingly study and care for survivors of COVID-19 who continue to suffer (2). As we await high-quality evidence to guide our clinical decisions, we must acknowledge the many ways that patients are suffering and do our best to help mitigate their symptoms while avoiding harm.

Christine Laine, MD, MPH Editor in Chief, Annals of Internal Medicine

Deborah Cotton, MD, MPH Deputy Editor, Annals of Internal Medicine **Disclosures:** All relevant financial relationships have been mitigated. Disclosures can be viewed at www.acponline.org/authors/ icmje/ConflictOfInterestForms.do?msNum=M22-1636.

Corresponding Author: Christine Laine, MD, MPH, Editor in Chief, *Annals of Internal Medicine*, 190 N. Independence Mall West, Philadelphia, PA 19106; e-mail, claine@acponline.org.

Ann Intern Med. doi:10.7326/M22-1636

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