Typically Atypical: COVID-19 Presenting as a Fall in an Older Adult

To the Editor: Initial reports of the coronavirus disease 2019 (COVID-19) pandemic described a novel respiratory illness resembling severe acute respiratory syndrome (SARS) clustered around a market in Wuhan, China.[1] Since then, there has been a surge of scientific inquiry into the spectrum of disease presentation; however, current case definitions still emphasize fever and respiratory symptoms as the primary presenting symptoms.[2] A case we recently saw at Mount Sinai Hospital in Toronto, Canada, illustrates why this definition may be overly restrictive, particularly in older adults, and why clinicians should have a low threshold to consider COVID-19 when assessing older patients.

CASE DESCRIPTION

An 83-year-old woman presented to an emergency department following an unwitnessed fall at home, with her only complaint being a vague sense of dizziness that developed that day. She had a medical history of hypertension, type 2 diabetes, and osteoporosis.

At triage, she was screened for COVID-19 symptoms and was deemed low risk. She was afebrile and not hypoxic. As there was a question as to whether the fall had a syncopal origin, further investigations were completed. Computed tomography (CT) of the brain showed no infarct or hemorrhage. Cardiac telemetry showed normal sinus rhythm. CT pulmonary angiogram showed no evidence of pulmonary embolism; however, ground glass opacities were identified throughout both lungs. The findings were reported as being possibly consistent with COVID-19 pneumonia. A nasopharyngeal swab for SARS coronavirus 2 (SARS-CoV-2) was collected.

She was placed on droplet-contact precautions and admitted to hospital. She soon developed hypoxia with a resting oxygen saturation of 87% and so was initiated on oxygen by nasal prongs. The following morning, her SARS-CoV-2 swab was confirmed positive. The local public health authority was notified, and her direct contacts were placed in self-isolation. She developed a fever of 38.7°C on day 2 of her admission. Laboratory investigations performed after admission revealed several abnormalities that have been previously described,[3] including elevated d-dimer, ferritin, and C-reactive protein.

She was admitted for 7 days in total. She was weaned off oxygen on day 5 and defervesced on day 6. Her dizziness, which has been described in COVID-19,[4] resolved. No orthostatic hypotension[5] was identified.

DISCUSSION

Much of the attention regarding care of older adults with COVID-19 has focused on its significant mortality rate (reaching 10%-27% for those >85 years[6]) or the possible need for rationing of limited resources, such as ventilators. Characterizing the spectrum of illness in older adults with COVID-19 will be important, however, to guide policies, support effective prognostication and decision making, and ensure equitable access to care.

Atypical presentation of illness is common in older adults. Symptoms, when present, may be nonspecific, with presentations including falls, delirium, or functional decline.[7] Symptoms of chronic conditions may mask acute illness, and sensory or cognitive impairment may limit an older adult's ability to perceive or report symptoms. Signs such as fever may be diminished or absent.[8] There is already evidence that screening based on typical symptoms alone, which failed in this case, is insufficient to identify COVID-19 in older adults.[9,10] This has significant implications for both clinical care and infection prevention and control, particularly in congregate living settings such as nursing homes, where frail older adults have experienced disproportionately high COVID-19–related morbidity and mortality. Given this, emerging recommendations are increasingly emphasizing the consideration of COVID-19 in older adults with any significant change from baseline.[11] The threshold to test should also be low. In this case, testing was initiated because of an incidental finding on chest imaging. As testing capacity increases, criteria for testing should be continuously reevaluated to ensure timely identification of those infected with COVID-19.

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