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- 2. US Census Bureau. 2000 Census Atlas, Glossary. Washington, DC: US Census Bureau; 2000.
- **3.** Burkhardt J, DesJardins S, Gruppen L. Diversity in emergency medicine: are we supporting a career interest in emergency medicine for everyone? *Ann Emerg Med.* 2019;74:742-750.

# Workplace Violence: The Congressional Vote on HR1309



# To the Editor:

A compelling and informative aspect of the excellent article on emergency department (ED) workplace violence<sup>1</sup> was the vote count on the federal legislation. That bill was HR1309 (Workplace Violence Prevention for Health Care and Social Service Workers Act), supported by the American College of Emergency Physicians (ACEP) and the Emergency Nurses Association. As the article pointed out, the bill passed the House of Representatives 251 to 158, with 21 members not voting. Of the members who did vote, the Democratic representatives voted 219 to 0 in favor, and the Republicans representatives voted 32 in favor and 157 against. We ought to ask those who voted against it why they did so. You can see how your representative voted here: http://clerk.house.gov/evs/2019/roll642.xml.

The bill moved to the Senate on November 21, 2019, and it has not been allowed to be considered since then. Of course, we all know that the House and the Senate have been and are consumed with other issues, but this one deserves attention now. Our job—to protect ourselves, our staff, and our patients—is to write our senators and ask that the bill move forward in their process. This should be a nonpartisan issue that deserves bipartisan support.

In most states, primary elections are coming up, and the general election is in November. Just as we are held accountable for our actions in the ED, so also we need to hold those who would not stand up for us accountable for their actions.

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 Kelly M. Violent attacks against emergency physicians remain a problem. 2020;75:A11-A14.

#### Syncope, Near Syncope, or Nonmechanical Falls as a Presenting Feature of COVID-19



# To the Editor:

Coronavirus disease 2019 (COVID-19) usually presents as a febrile illness with lower respiratory tract symptoms.<sup>1-3</sup> However, atypical presentations, such as syncope, may occur. Annually in the United States, syncope triggers an estimated 1.2 million visits to emergency departments and 440,000 hospital admissions at a cost of \$2.4 billion.<sup>4</sup> Furthermore, there is wide variation among practitioners' approaches to the evaluation of syncope, and in greater than half of the cases, the cause remains undetermined.<sup>4</sup> The emergence of SARS-COV-2 may further complicate the evaluation of syncope. A missed or delayed diagnosis of COVID-19 because of an unusual presentation would lead to preventable exposures and increased transmission.

We sought to minimize missed or delayed diagnosis of COVID-19 by maintaining vigilance for atypical presentations of the disease.

Rochester Regional Health System is a 5-hospital health care system comprising 1,056 licensed beds, with an 11county service area in upstate New York. For public health, infection control, and exposure determinations, the medical record of every patient who tests positive for SARS-CoV-2 by reverse-transcription polymerase chain reaction is prospectively reviewed. Statistical analysis was performed with ANOVA and  $\chi^2$  tests.

As of March 31, 2020, of 1,950 patients tested, 163 have been confirmed as having a positive test result. After review of the first 102 consecutive patients, we observed that the main reason 24 (24%) initially sought care was syncope, near syncope, or a nonmechanical fall. Fever or the typical respiratory symptoms were secondarily or incidentally found. Compared with the group of patients who did not present with syncope, near syncope, or nonmechanical fall, a higher proportion of the syncope patients required oxygen, had gastrointestinal symptoms, or had elevated troponin levels. However, these differences were not significant (Table). Furthermore, intravascular volume status, as reflected by mean blood urea nitrogen levels, was not significantly different (Figure).

Numerous underlying conditions, both cardiogenic and noncardiogenic, can cause syncope or near syncope. Similarly, the reasons for syncope in COVID-19 patients

#### Table. Characteristics of COVID-19 patients with and without syncope.

|   | COVID-19 Patients With Syncope,<br>Presyncope, and Nonmechanical Falls,<br>24/102 (23.5%) (Mean Age 61 Years) | COVID-19 Patients Without Syncope,<br>Presyncope, and Nonmechanical Falls,<br>78/102 (76.5%) (Mean Age 57 Years) | P Value |
|---|---|--|---------|
| Cardiovascular disease history (%)              | 7 (29)  | 22 (28)  | .93     |
| Required supplemental oxygen (%)                | 15 (62.5)   | 32 (41)  | .06     |
| Reported GI symptoms (%)                        | 13 (54)   | 28 (36)  | .11     |
| Mean BUN  | 20.21   | 21.29  | .76     |
| Mean troponin level                             | 0.40  | 0.74   | .69     |
| Patients with elevated troponin level (%)       | 6 (25)  | 9 (11.5)   | .10     |
| GI, Gastrointestinal; BUN, blood urea nitrogen. |   |  |         |

are likely multifactorial. COVID-19 patients with underlying cardiovascular disease have increased mortality, and whether syncope is a manifestation of COVID-19–related cardiovascular disease is unknown. Cardiovascular disease is accompanied by dysregulation of angiotensin-converting enzyme 2, and SARS-Co-V2 uses

the same enzyme to initiate infection.<sup>5</sup> Studies to date have not specifically noted syncope as a presenting symptom.<sup>1-3</sup> However, in 3 reports from China, 7.3% of COVID-19 patients complained of heart palpitations, 2% complained of chest pain, and 9.4% complained of dizziness.<sup>1-3</sup> However, those data may not be fully generalizable to US populations because of differences in the prevalence of tobacco use and cardiovascular disease, and because of dietary patterns.

We present this to alert clinicians that syncope may be a presenting feature of COVID-19 in the United States. Vigilance for syncope as a presenting symptom can



Figure. One-way ANOVA comparing mean blood urea nitrogen values. Cl, Confidence interval.

potentially allow earlier identification and isolation of infected patients.

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# IMAGES IN EMERGENCY MEDICINE

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# **DIAGNOSIS:**

*Hydropneumopericardium as a result of invasion of esophageal cancer.* This is a rare complication of esophageal cancer. Early diagnosis is a challenge because the initial symptoms, including retrosternal pain, dyspnea, and fever, are similar to the adverse effects of chemotherapy and radiation therapy.<sup>1</sup> Point-of-care ultrasonography may be a good tool for early detection of this complication. The featured finding of pneumopericardium on ultrasonography is air artifacts obscuring the anterior wall of the heart and appearing cyclically with the cardiac cycle.<sup>2</sup> The finding has been reported as cardiac A lines.<sup>3</sup> Similar features in describing pneumomediastinum, such as a "disco spotlight," have also been reported.<sup>4</sup> However, in pneumomediastinum, the inferior surface of the heart attaches well to the diaphragm and is usually not obscured by air in the subxiphoid view. <sup>3</sup> This can be differentiated from pneumopericardium.

In this patient, cardiac tamponade was suspected. Thoracic and cardiovascular surgeons were consulted for surgical evaluation. However, the patient refused invasive procedure and wanted palliative care. He died 8 days later after admittance to the hospice ward.

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