Defying All Odds: A Case of Mild COVID-19 in an Elderly Patient with Multiple Comorbidities

Angela Y. Chang1, Estela Rodriguez Alonso, MD2, Rebecca Newman, MD2, Forugh Homayounrooz, MD, FACP2

1Columbia University College of Physicians and Surgeons, 2Department of Medicine, Stamford Hospital, Stamford, CT

Background

- The COVID-19 pandemic has spread rapidly around the globe, with over 4.6 million total cases identified in the US as of August 2020.
- Clinical course ranges from mild, asymptomatic disease to severe, multi-organ failure and death.
- Older age and comorbidities including diabetes, hypertension, cardiovascular disease, and obesity are linked to more severe infection. Specifically, diabetes is associated with a two-fold increase in mortality and a more severe clinical course, with an increased prevalence of ARDS as well as need for invasive ventilation and ICU admission.
- Protective factors are unknown; nevertheless, studies are ongoing, including examining the relationship between blood type and COVID-19 susceptibility.
- We present a case of an elderly woman who had a mild case of COVID-19 despite multiple uncontrolled comorbidities.

Case Presentation

An 80-year-old uninsured, Hispanic female with A+ blood type and history of uncontrolled diabetes mellitus type II, hypothyroidism, class I obesity, and recurrent deep venous thromboses, on Coumadin.

October 2019

Seen by her primary care physician after not following up for over a year. She had not been taking any medication after running out of refills months prior. At that visit, her Hgb A1C was 13.2% and TSH was 16. All of her medications were refilled, and she was given another appointment for close follow up.

April 2020

She presented to the ED with fever, cough, and shortness of breath. She was alert with PO2 saturation of 97% on room air, blood pressure 102/79, heart rate of 99, and afebrile. Her physical exam at the time was unremarkable. A chest x-ray (Image1) showed bilateral lower lung interstitial opacities. Labs showed evidence of uncontrolled diabetes. COVID-19 infection confirmed by nasopharyngeal swab. She was discharged on Azithromycin and made a full recovery.

July 2020

Lost to follow up until telemedicine appointment. She reported medication compliance but had not checked her INR in over five months.

August 2020

Presented back to the ED for hyperglycemia. CXR (Image 2) showed clear lung fields and a sub-therapeutic INR at 0.9. She was discharged after receiving insulin and IV fluids.

Imaging

Image 1 Bilateral lower lung interstitial opacities

Image 2 Clear lung fields

Conclusion

- This case is unique in that despite this patient's multiple risk factors that predict more serious infection, she had a mild case of COVID-19.
- Generally, older age, disadvantaged and minority populations, and comorbidities increase risk of more severe disease.
- Studies that examine protective factors are ongoing, including the relationship between blood type and COVID-19 susceptibility; O is proposed as protective and A, as in this patient, is associated with higher risk.
- There is still much to be learned about the interplay of factors dictating severity of COVID-19 disease.
- Cases such as this one that do not follow the expected pattern should be further studied to evaluate for possible protective factors.

References