

COVID-19 and HIV co-infection an emerging consensus

To the Editor,

Toombs et al provide an important contribution to the emerging literature which seeks to establish if those people living with human immunodeficiency virus (PLWH) are disproportionately affected by the coronavirus disease 2019 (COVID-19) pandemic.¹ Evidence from their case series have been consistent with the hypothesis that PLWH do not experience disproportionately greater hospital admission, morbidity, or mortality.

First, the low prevalence (0.34%) of human immunodeficiency virus (HIV) in their studied population of 500 000 people is similar to the proportion (0.43%) of COVID-19 patients with HIV admitted to their hospital. This is consistent with other studies that were generalized to the broader population, which found no increased risk of coinfecting individuals who were hospitalized.²⁻⁷


Second, one patient who expired was a sixty-two year old male, who had significant co-morbidities, such as type 2 diabetes mellitus and hypertension. Besides male sex and older age, it has been suggested that it is the presence of such co-morbidities and not HIV infection itself that are the harbingers of poor prognosis.^{8,9} Solid organ transplantation is unlikely to have contributed to the demise of this patient because several HIV-positive transplant recipients have been cured of COVID-19.¹⁰⁻¹²

Third, one of the patients reported by Toombs and colleagues had a high viral load of greater than one million copies per mL and a low CD4 count of 50 cells per μ L. Despite this adverse immunologic profile, this patient recovered from COVID-19 and was discharged from the hospital. The above observation is consistent with the clinical cure of at least four patients with COVID-19, who were newly diagnosed with HIV.¹³⁻¹⁶

These early observations regarding aspects of morbidity and mortality in severe acute respiratory syndrome coronavirus 2 and PLWH are encouraging. However, more research is needed to clarify clinical and therapeutic aspects including drug-drug interactions (pharmacokinetic and pharmacogenomic data as well as genetic polymorphism). Populations of special interest like pregnant women deserve special attention.

CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

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