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EPO in Patients With COVID-19: More Than an Erythropoietic Hormone



To the Editor:

In their editorial, Fishbane and Hirsh¹ discuss associations between systemic inflammation and anemia in patients with coronavirus disease 2019 (COVID-19). This relationship, putatively attributed to hepcidin effects on iron availability, limits erythropoietin (EPO) efficacy. Despite this, the authors theorize that synergism between severe COVID-19 and erythropoiesis-stimulating agent use may produce dangerous thrombosis risks. They propose reduced hemoglobin level targets in maintenance dialysis patients with COVID-19 despite an association between anemia and more severe COVID-19.² We contend that this approach, although reasonable, is potentially problematic.

Disordered inflammatory responses underlie end-organ damage in patients with COVID-19. Increased levels of interleukins (eg, IL-1 β and IL-6) are independently associated with disease severity/mortality, and therapies targeting IL-1 β and IL-6 effects show promising results.³ Our group and others showed that EPO immunoregulating effects include inhibiting IL-1 β and IL-6 production by monocytes and promoting regulatory T-cell survival.⁴ In addition, growing evidence establishes global tissue-protective antiapoptotic effects of EPO, especially in organs targeted in COVID-19. Consistent with this, a recent case report attributed respiratory distress amelioration in an anemic 80-year-old man to EPO use.⁵

Therefore, in COVID-19 patients, the benefits of erythropoiesis-independent EPO effects may far outweigh the risks. As such, further analysis and controlled studies are warranted to define how EPO treatment should be optimized in maintenance dialysis patients with COVID-19 and anemia.

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Support: None.

Financial Disclosure: The authors declare that they have no relevant financial interests.

Peer Review: Received May 31, 2020. Accepted June 1, 2020, after editorial review by an Associate Editor and a Deputy Editor.

Publication Information: © 2020 by the National Kidney Foundation, Inc. Published online June 10, 2020 with doi [10.1053/j.ajkd.2020.06.002](https://doi.org/10.1053/j.ajkd.2020.06.002)

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Fishbane and Hirsch declined to respond.

RESEARCH LETTERS

eVisits in Rural Hemodialysis Care: A Qualitative Study of Stakeholder Perspectives on Design and Potential Impact to Care



To the Editor:

People living in rural communities often experience barriers in accessing health care.¹ Electronic visits (eVisits) are online consultations between patients and health care providers in which patients attend virtually from home.² eVisits have several potential benefits,² particularly for rural populations, and their use appears to be increasing.³ Management of kidney failure with maintenance hemodialysis (HD) requires regular contact with nephrologists for follow-up care and eVisits appear well suited for this setting. However, the current level of interest, potential benefits and concerns, and requisite design features for an eVisit program for HD are unknown. We did this study to evaluate perceptions of patients and providers to inform the future design of a rural eVisit program specific to maintenance HD care.

Full methods are in [Item S1](#). In brief, we interviewed patients receiving in-center HD from 1 of 2 units in rural Alberta. We purposively recruited those who had been