Prevalence of COVID-19 Infection in Hemodialysis Patients Detected Using Serologic Screening

The communication by Clarke et al.[1] published this past July reports a high prevalence of serologically detected coronavirus disease 2019 (COVID-19) infection among patients of two London hemodialysis units. A universal severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) screening program, with detection of IgG and IgM against the virus and bimonthly RT-PCR test, was also performed in the two units affiliated to our center, Hospital Clínic of Barcelona. Interestingly, some remarkable differences between our findings and the ones published in this journal are worth noting.

Even though there is a much higher overall prevalence in the city of London than here in Barcelona (14.5%, and 7% respectively),[1,2] the prevalence in the studied population of patients on in-center hemodialysis is strikingly higher (36.2%, 129 of 356). In contrast, our in-center hemodialysis prevalence was much closer to that of the general population (9.2%, 13 of 141).

The infection precaution measures adopted by the London cohort on the basis of the National Institute for Health and Care Excellence guidelines seem similar to ours.[3,4] However, there are some significant differences. First, every patient, nurse, and cleaning staff member, regardless of COVID-19 status, has always been required to wear a mask during the totality of the hemodialysis session. Second, our screening system adds the bimonthly RT-PCR test, with which we have diagnosed two asymptomatic patients and thus, provided proper isolation for their hemodialysis sessions. Finally, a SARS-CoV-2 RT-PCR–positive patient could only be deisolated after two consecutive negative results at least 2 weeks after the initial diagnosis.

Although epidemiologic disparities are expected between countries, it is important to inform of different experiences, such as those exposed in this letter. These deisolation, detection, and physical barrier preventive measures were stricter than those applied in London. Thus, they may have reduced the viral exposure of such a high-risk population and at least in part, may explain the difference in prevalence seen between both cohorts.

DISCLOSURES

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REFERENCES

1. Clarke C, Prendecki M, Dhutia A, Ali MA, Sajjad H, Shivakumar O, et al.: High prevalence of asymptomatic COVID-19 infection in hemodialysis patients detected using serologic screening. J Am Soc Nephrol 31: 1969–1975, 2020
2. Pollán M, Pérez-Gómez B, Pastor-Barriuso R, Oteo J, Hernán MA, Pérez-Olmeda M, et al.: ENE-COVID Study Group: Prevalence of SARS-CoV-2 in Spain (ENE-COVID): A nationwide, population-based seroepidemiological study. Lancet 396: 535–544, 2020
3. National Institute for Health and Care Excellence: COVID-19 rapid guideline: Dialysis service delivery. NICE guideline [NG160], 2020. Available at: https://www.nice.org.uk/guidance/ng160. Accessed August 18, 2020
4. Gobierno de España-Ministerio de Sanidad: Documento técnico: Recomendaciones para el manejo, prevención y control de COVID-19 en Unidades de Diálisis, 2020. Available at: https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov-China/documentos/COVID19-hemodialisis.pdf. Accessed August 18, 2020

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