



## LETTER TO THE EDITOR

## Silent COVID-19 in haemodialysis facilities in Cantabria, Spain: an ecological study

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SARS-CoV-2 is a new strain of  $\beta$ -coronavirus whose rapid spread has generated the current 'coronavirus disease 2019 (COVID-19)', leading to a pandemic on 11 March 2020. COVID-19 is more severe in populations with associated morbidities, thus it is expected that patients with end-stage renal disease under renal replacement therapy can suffer more severe complications. Within this group, those on haemodialysis (HD) are at higher risk of infection because of difficulties executing appropriate isolation measures. These individuals need to utilize HD facilities, potentially exposing them to other patients and healthcare workers and sharing transport vehicles [1]. The occurrence of COVID-19 in HD patients was reported at 16–30% at the beginning of the pandemic in two vastly affected areas: Hubei (China) and Lombardy (Italy). Infections were determined by the standard reverse transcription polymerase chain reaction (RT-PCR) method; however, the prevalence could be underestimated by using this technique [1–4].

Most PCR-confirmed SARS-CoV-2-infected persons seroconvert by 2 weeks after disease onset. The availability of new serological assays is crucial to carry out epidemiological studies for determining how many patients have suffered a 'silent' form of COVID-19. Identifying previously asymptomatic cases could help to determine the global affliction of the disease and the real mortality rate in HD patients [5]. Thus we performed an ecological study to ascertain the current infection rate and previous exposure of the whole patient population receiving chronic HD in Cantabria, Spain. Our region has two HD facilities in which currently 226 patients are treated three times a week—University Hospital Marqués de Valdecilla in Santander being one of these facilities. RT-PCR and serologic studies were

performed the second week of April 2020 in all patients. Real-time RT-PCR was performed with nasopharyngeal swabs using the Roche Cobas SARS-CoV-2 assay on the Cobas 480 system (Roche Diagnostics, Rotkreuz, Switzerland) and immunoglobulin G (IgG) and IgM by chemiluminescence immunoassay (MAGLUMI 2000 Plus 2019-nCoV; Stribe, Shenzhen, China). Only one patient on HD suffered symptomatic COVID-19, validated by RT-PCR, needed hospitalization with admission to the intensive care unit until death. RT-PCR was negative in 226 patients. Strikingly, eight patients tested positive only for IgG and two only for IgM, suggesting previous asymptomatic 'silent' COVID-19 infections in 4.4% of HD patients.

On the one hand, such a low occurrence in a high-risk group highlights the importance of following strict detection and isolation measures provided by the European Dialysis (EUDIAL) Working Group of the European Renal Association–European Dialysis and Transplant Association [1]. Our analysis was carried out 4 weeks after implementing rigorous screening and isolation measures, which succeeded in limiting COVID-19 in our HD population. Conversely, we want to stress the usefulness of detecting seroconversion status to trace infection spreading and understand the strain of the disease, the true morbidity/mortality rate, the possibility of reinfection and additional serologic response to future vaccines—at least in the setting of HD patients.

### CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest. The results presented in this article have not been published previously in whole or in part.

Received: 9.5.2020; Editorial decision: 11.5.2020

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