

6. Devuyst O, Thakker RV. Dent's disease. *Orphanet J Rare Dis.* 2010;5:28.
7. Karatzas A, Paridis D, Kozyrakis D, Tzortzis V, Samarinas M, Dailiana Z, et al. Fanconi syndrome in the adulthood. The role of early diagnosis and treatment. *J Musculoskelet Neuronal Interact.* 2017;17:303–6.
8. Jagtap VS, Sarathi V, Lila AR, Bandgar T, Menon P, Shah NS. Hypophosphatemic rickets. *Indian J Endocrinol Metab.* 2012;16:177–82.
9. Lihua J, Feng G, Shanshan M, Jialu X, Kewen J. Somatic KRAS mutation in an infant with linear nevus sebaceous syndrome associated with lymphatic malformations: a case report and literature review. *Medicine (Baltimore).* 2017;96:e8016.
10. Ruppe MD. X-linked hypophosphatemia. In: Adam MP, Ardinger HH, Pagon RA, et al., editors. *GeneReviews*(R). Seattle (WA); 1993.

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## SARS-CoV-2 screening in chronic hemodialysis patients in a third-level hospital and its peripheral centers: 'one hour less in the Canary Islands'<sup>☆</sup>

### Cribado de SARS-CoV-2 de pacientes en hemodiálisis crónica en un hospital de tercer nivel y sus centros periféricos: una hora menos en Canarias

Dear Editor,

Infection by SARS-CoV-2 currently continues to pose a threat to global public health. Our Autonomous Community of the Canary Islands presented between 108–135 new cases/day during the peak of the pandemic (between 23 and 27 March, 2020).<sup>1</sup> The population of haemodialysis patients is especially vulnerable given their specific characteristics.<sup>2</sup> For these reasons, our hospital and its satellite dialysis centres established their own biosafety protocol in accordance with national and regional guidelines.

Once the peak of the disease had passed (106 days later), it was decided to do a cross-sectional screening with SARS-CoV-2 RNA PCR, using the *transcription-mediated amplification* technique and total antibodies using the enzyme-linked immunosorbent assay (ELISA) in our population (n = 350) with the aim of determining the repercussions of the disease in terms of asymptomatic and/or past infection. Demographic

data were collected from electronic records and are detailed in [Table 1](#).

A 36.9% were female, the mean age was 65 ± 13.55 years, 48.6% had type 2 diabetes mellitus as the principal comorbidity and 94% had arterial hypertension. The main causes of kidney disease were: diabetic nephropathy (27.4%) and unknown (25.4%).

**Table 1 – Baseline characteristics of the population.**

Variable	Participants (n = 350)
Female gender, n (%)	129 (36.9)
Age (years) (mean) (SD)	65.73 (13.55)
Time on haemodialysis (months) (mean) (SD)	55.85 (73.92)
[0,1–2]Aetiology, n (%)	
Not determined	89 (25.4)
Nephroangiosclerosis	39 (8.3)
Diabetic nephropathy	96 (27.4)
Glomerulonephritis	49 (14)
Hepatorenal polycystic disease	29 (8.3)
Oncological	4 (1.29)
Tubulointerstitial nephritis	16 (4.6)
Systemic diseases	25 (4.3)
Other	23 (6.6)

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The result showed that no patient tested positive in the SARS-CoV-2 RNA PCR and all were negative for total antibodies.

The importance of SARS-CoV-2 screening has been discussed recently by some authors.<sup>3</sup> Since haemodialysis patients are especially vulnerable due to their clinical and logistical characteristics (for example, their need to go to the hospital an average of three to four times a week), we consider that the screening of both the population and the personnel who care for them is fundamental.

The results obtained in our series may be due to four causes: 1) the low prevalence of the disease during the peak of the pandemic in the northern area of the island of Gran Canaria<sup>1</sup>; 2) since the time for preparation was longer than in other provinces, protocols were established for both physical distancing and strict clinical control (for example, use of masks by all patients, limitation of visits, temperature measurement before entry into the units, etc.)<sup>4</sup>; 3) the measurement of antibodies was conducted late,<sup>5</sup> and 4) the political measures were adopted early, such as the closure of schools, airports and harbors, among others.<sup>6</sup>

## REFERENCES

1. Cartográfica de Canarias, S.A. COVID-19 Canarias: Gobierno de Canarias (Servicio Canario de Salud) [Accessed 8 Aug 2020]. Available from: <https://grafcan1.maps.arcgis.com>.
2. Wu Z, McGoogan JM. Characteristics of important lessons from the coronavirus disease 2019 (COVID-19) outbreak in China: summary of a report of 72 314 cases from the Chinese Center for Disease Control Prevention. *JAMA*. 2020;10, <http://dx.doi.org/10.1001/jama.2020.2648>, 1001/jama.2020.2648. [Electronic publication 24 Feb 2020].

3. Dudreuilh C, Moutzouris DA. Is SARS-CoV-2 serology relevant for hemodialysis patients with COVID-19? *Am J Kidney Dis*. 2020. S0272-6386:30784-8, <https://doi.org/10.1053/j.ajkd.2020.06.006> [Electronic publication 27 Jun 2020].
4. Albalade M, Arribas P, Torres E, Cintra M, Alcázar A, Puerta M, et al. [High prevalence of asymptomatic COVID-19 in haemodialysis: learning day by day in the first month of the COVID-19 pandemic] Alta prevalencia de COVID-19 asintomático en hemodiálisis. *Apreniendo día a día el primer mes de pandemia de COVID-19*. *Nefrologia*. 2020;40:279-86, <http://dx.doi.org/10.1016/j.nefro.2020.04.005>.
5. Rapid decay of Anti-SARS-CoV-2 antibodies in persons with mild Covid-19 [Electronic publication 23 Jul 2020]. *N Engl J Med*. 2020, <http://dx.doi.org/10.1056/NEJMx200017>.
6. Boletín Oficial de Canarias Orden de 12 de marzo 2020 [16 Mar 2020; Accessed 8 Aug 2020]. Available from: <http://www.gobiernodecanarias.org/boc/2020/052/006.html>.

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# A patient with COVID-19 and anti-glomerular basement membrane disease

## Un paciente con Covid-19 y enfermedad de la membrana basal anti glomerular

Dear Editor,

Elderly patients and patients with co-morbidities such as hypertension, diabetes and heart disease are under risk of COVID-19.<sup>1</sup> Anti-glomerular basement membrane (anti-GBM) disease is an autoimmune disease presenting with features of rapidly progressive glomerulonephritis and alveolar

hemorrhage.<sup>2</sup> It requires an aggressive immunosuppressive treatment.

We report the case of a 80-year-old female patient with anti-GBM disease who had a fatal course after acquiring a severe COVID-19 infection under immunosuppressive treatment. She had well-controlled hypertension and presented with fever, dyspnea, hemoptysis and hematuria for the last five days. Her laboratory values were as follows: Creatinine (Cre): 6.0 mg/dL, blood urea nitrogen (BUN): 86.6 mg/dL, sodium (Na): 139 mEq/L, potassium (K): 3.6 mEq/L, uric acid (Ua): 12.6 mg/dL, albumin (alb): 3.1 g/dL, erythrocyte sedimentation rate (ESR): 64 mm/h, CRP: 14.8 mg/dL, BNP: 403 pg/mL, procalcitonin: 1.14 ng/mL. Urinalysis revealed 1226

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