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**INSTITUTIONAL TRANSPORT AS RISK FACTOR FOR COVID-19 IN HEMODIALYSIS PATIENTS**

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**BACKGROUND AND AIMS:** Hemodialysis patients face an exceptional risk in the current COVID19 pandemic, both for infection/transmission as well as for mortality. All efforts to reduce potential risk factors are needed to protect this vulnerable group. We aimed to evaluate risk factors for SARS-CoV-2 infection and transmission during the first COVID19 wave, in order to tackle these factors in the second.

**METHOD:** We included all hemodialysis patients who were dialyzed at our central institution on March 19, 2020 (date of first COVID19 diagnosis). External low care and home hemodialysis patients were excluded. Our central hemodialysis center has 5 dialysis shifts in 6 units located next to each other, with a separate seventh dialysis unit dedicated for COVID19 isolation. COVID19 infections were diagnosed with nasopharyngeal swab PCR at the discretion of the treating nephrologist. On May 18 and 19, after the first wave, all hemodialysis patients were evaluated for presence of SARS-CoV-2 antibodies using ELISA to screen for previous asymptomatic infections. Chi square and logistic regression were used for statistical analyses.

**RESULTS:** 216 hemodialysis patients were included in this study, with a mean age of 72 years old (IQR 65-83). COVID19 was diagnosed in 17 patients during the first wave: in 15 symptomatic cases through nasopharyngeal swab PCR and in two additional asymptomatic cases through SARS-CoV-2 IgG positivity. Interestingly, we observed

that 58.8% of COVID19 patients were transported by the same transport company, while this company transports only 20.4% of hemodialysis patients ( $p=0.005$ ) (Figure A). As such, 22.7% of patients transported by this company became infected (OR 6.93, 95% CI 2.49-20.34,  $p=0.0002$ ).

**CONCLUSION:** Institutional transport was the most significant risk factor for SARS-CoV-2 infection among hemodialysis patients at our center. After stringent prevention measures we were able to prevent transmission during transport in the second wave of the COVID19 pandemic.

