

MO844

COVID-19 PANDEMIC IN DIALYSIS PATIENTS IN SWITZERLANDRebecca Winzeler¹, Patrice Max Ambühl¹¹Institute of Nephrology, Zurich, Switzerland

BACKGROUND AND AIMS: COVID-19 is an infectious disease that can result from infection with the novel coronavirus SARS-CoV-2. The disease, was first described in Wuhan at the end of 2019 and the first case in Switzerland was discovered in February 2020. This analysis gives an overview of dialysis patients in Switzerland that were tested COVID-19 positive.

METHOD: All dialysis centers reported their cases with COVID-19 to the Swiss dialysis registry srrqap. All patients reported to the registry between March 5 (1st dialysis patient with COVID-19) and June 30, 2020 were included in this analysis and comparisons were made with COVID-19-free dialysis patients (from 2019).

RESULTS: On March 5, 2020, the first dialysis patient was infected with COVID-19 in Ticino. The number of infected dialysis patients increased rapidly over the months of March and April, with the majority of patients in the cantons of Vaud (23.5%), Ticino (22.3%) and Geneva (18.8%) and together making up almost 65% of the COVID-19-infected dialysis patients in Switzerland. COVID-19 cases represented 2.4% of all prevalent patients on dialysis (as of 31.12.2019).

Twenty-seven (12 female, 15 male) out of 93 dialysis patients died, which corresponds to a mortality rate of 29%. Mortality was highest in patients from Switzerland (together with the Netherlands), and lowest in Romania with 8.5% (K. Jager and A. Kramer, submitted for publication, 2020).

Mortality was associated with advanced age in dialysis patients. In contrast to the general population, male sex, diabetes and hypertension were no major risk factors for mortality in our cohort.

CONCLUSION: Although dialysis patients from Switzerland in general have a better survival compared to those from other European countries, infection with COVID-19 in Switzerland results in the highest mortality compared to other European countries

in this population. In addition, male sex, diabetes and hypertension seem not to be associated risk factors in our dialysis population.

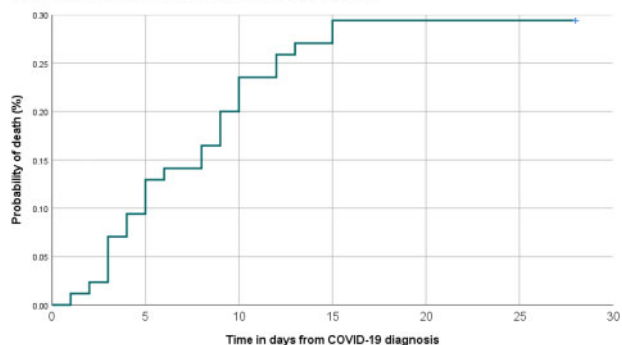
MO844 Table 1. Characteristics (given as mean ±SD or percentage) in dialysis patients with COVID-19 and COVID-19-free dialysis patients

	With COVID-19 (n=93)	Without COVID-19 (n=4619)	p-value
Age, years	70.0 ± 15.5	68.9 ± 14.7	0.103
Male gender, %	65.6	65.2	0.898
Body mass index, kg/m ²	27.3 ± 5.4	25.9 ± 5.7	0.228
Dialysis vintage, years	5.5 ± 12.7	4.0 ± 4.0	0.624
Dialysis duration per week (h)	11.4 ± 1.4	11.5 ± 1.4	0.749
Kt/V	1.55 ± 0.39	1.59 ± 0.41	0.259
Hemoglobin, g/dL	10.9 ± 1.4	11.1 ± 1.4	0.506
Ferritin, ng/mL	507 ± 416	510 ± 434	0.448
Calcium, mmol/L	2.21 ± 0.19	2.22 ± 0.19	0.822
Phosphate, mmol/L	1.50 ± 0.46	1.62 ± 0.48	0.769
PTH, ng/L	317.6 ± 238.2	369.2 ± 328.4	0.148
Comorbidities, n	2.9 ± 2.3	2.6 ± 2.0	0.047
CCI*	4.6 ± 2.2	4.5 ± 2.2	0.536
Hypertension, %	88.2	83.1	0.209
Diabetes Mellitus, %	43.5	37.7	0.273
Iron substitution, %	78.8	72.7	0.207
EPO substitution, %	81.2	79.7	0.732

MO844 Table 2. Characteristics (given as mean ±SD or percentage) in dialysis patients with COVID-19 according to their survival status

	Non-Survivors, n=25	Survivors, n=60r	p-value
Age, years	80.1 ± 7.4	65.1 ± 16.6	0.000
Male gender, %	52.0	71.7	0.081
Body mass index, kg/m ²	28.3 ± 6.4	26.9 ± 4.9	0.282
Dialysis vintage, years	3.7 ± 4.1	4.2 ± 3.4	0.798
Comorbidities, n	3.4 ± 1.7	2.7 ± 2.4	0.046
CCI*	4.9 ± 1.9	4.5 ± 2.3	0.341
Diabetes, %	44.0	43.3	0.955
Hypertension, %	76.0	93.3	0.024

Figure 1: Probability of death in dialysis patients in Switzerland



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