MO891 **HEMODIALYSIS PATIENTS AMID COVID-19 PANDEMIC: A COMPARISON BETWEEN FIRST AND SECOND WAVE**

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BACKGROUND AND AIMS: Data about HD patients and how to best dialyze them during the COVID-19 pandemic are scarce. The aim of the study is to describe the organizational model and clinical outcomes of patients confirmed COVID-19 needing renal replacement therapy, admitted in a COVID Hospital in Southern Italy during the first and second pandemic wave.
METHOD: All the consecutive patients requiring chronic HD, during the first and second wave were considered. Due to local resources, we have implemented an organizational model based on the HD bedside with Genius system. The machine was prepared in the Dialysis Unit and then transferred to the COVID Hospital. After treatment, the monitor was sterilized and carefully cleaned with chlorine wipes and re-transferred into the dialysis Unit to be prepared for the next dialysis. Demographic data, clinical symptoms at presentation, and laboratory results were extracted by the electronic medical record. Patients hospitalized during the first wave (FW) and second wave (SW) were compared.
RESULTS: From March 10 through December 31 2020, we enrolled a cohort of 40 patients (37.5% F), with COVID-19 infection requiring HD; 11 (27.5%) during first and 29 (72.5%) during second wave. The phenotype and clinical symptoms at the admission were not different between two groups. Compared to FW, the SW patients were younger (70.1±9.5 vs 77.3±5.9 years; $p<0.03$) with lower dialysis vintage (35±18 vs 60±48 months; $p<0.05$), and lower Charlson Comorbidity Index scores (2.8 ± 1.8 vs 5.09 ± 2.0; $p<0.05$). No differences were observed between the first and second wave as far as inflammatory markers IL6 (51.9 ± 44.8 vs 55.45 ± 40.52 pg/mL; ns) and C-reactive protein (4.74 ± 3.8 vs 6.70 ± 5.44 mg/L; ns) as well as the hospital stay (21.1±10 vs 24.4.8±10 days; ns) and in-hospital mortality (28.1% vs 18.2%; ns). Overall, 354 bedside treatments were performed; mean session time and mean weekly sessions were 3.64 ± 0.40 hours, and 3.4 ± 0.45 HD/week, with no differences between FW and SW patients.
CONCLUSION: Our data show that the higher spread of Sars-cov2 during the second wave has infected younger and less comorbid HD patients, with no significant differences in clinical and laboratory parameters. Our organizational model based on the HD bedside with the Genius system, allowed a personalized treatment with efficacy and safety for the patients and staff.