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shortening or missing sessions was reported to be low (overall 3.8% of centres reported that many patients missed sessions). Rates of suspected or confirmed SARS-CoV-2 in staff were highly variable, ranging from 0% in 90% of centres in North East Asia to $\geq 50\%$ in 63% of centres in the Middle East and 68% of centres in the Newly Independent States and Russia. In most centres $< 10\%$ of staff died, although in Africa and South Asia 2 and 6% of centres reported $\geq 50\%$ mortality.

Conclusions: The effect of the COVID-19 pandemic has been significant. Access to haemodialysis was hampered, rates of infection and mortality amongst patients and staff were high and the ability to follow IPAC and other guidelines was limited in certain regions of the world due to inadequate availability of testing and personal protective equipment with consequences to patient and staff wellbeing. It remains to be seen what the long term effect of these short-comings and the availability of vaccines will have on patients and services in the future.

Conflict of interest

Potential conflict of interest:

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POS-927

OUTCOMES OF 4000 COVID POSITIVE HEMODIALYSIS SESSIONS – EXPERIENCE FROM SOUTH INDIA



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Introduction: The COVID 19 pandemic resulted in extraordinary increase in the number of patients requiring renal replacement therapy. The kidneys are not typically the main target of SARS-CoV-2, but surprisingly, acute kidney injury (AKI) occurs in 4-23% of cases. Maintenance hemodialysis (HD) patients are at increased risk for COVID-19 and its complications due to a high burden of comorbid conditions and the mandatory congregates nature of HD facilities. In this report we described our experience with COVID-19 in our centre in South India.

Methods: Aim : To analyse 4000 sessions of Hemodialysis in COVID patients

Design : Retrospective observational study

Setting : Tertiary Care Government Hospital in Telangana

Participants : COVID patients who underwent Hemodialysis at our hospital

Period of study : April 2020 to May 2021

Inclusion criteria : All admitted COVID positive patients who underwent Hemodialysis

Exclusion criteria : 1. Patients who are not diagnosed as COVID

2. All patients who are not receiving Hemodialysis

Methodology : all patients were supported with dialysis in dedicated COVID unit or bedside dialysis, single use dialyser with of 1.3 m² surface area with Nipro dialysis machine. Patients who needed temporary access IJV or femoral catheterization was done depending on condition of patient. Dialysis prescription were give to each patient (Blood flow, Dialysate flow, Duration of session and Heparin). Data was collected from case records of all eligible patients, collected data was analysed using SPSS 2020

Results: Total number of patients 539

Parameters		
Age	48.92 ±13.11 years	
Sex	Male	403 (74.8%)
	female	136 (25.2%)
Diabetes	207 (38.4%)	
Hypertension	455 (84.4%)	
Coronary Artery Disease	37 (6.9%)	
Cerebrovascular Accident	10 (1.9%)	
Chronic Kidney Disease on Maintenance Hemodialysis	354 (65.6%)	
Acute deterioration of Chronic Kidney Disease	121 (22.4%)	
Acute Kidney Injury	64 (11.9%)	

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Parameters		
Fever	469 (87.0%)	
Cough	289 (53.6%)	
Breathlessness	366 (67.9%)	
Access	AVF	330 (61.2%)
Femoral	52 (9.6%)	
IJV	149 (27.6%)	
Perm cath	8 (1.5%)	
Hemoglobin (gm/dl)	9.11 + 1.63	
White blood cell count	8.2 ±5.5 × 10 ³ /cumm	
Platelets count	1.48 ±0.65 × 10 ⁹ /cumm	
Blood Urea (mg/dl)	110.1 ±59.8	
Serum creatinine (mg/dl)	7.81 ±5.75	
qSOFA score	0	176 (32.7%)
	1	248 (46.0%)
	2	108 (20.0%)
	3	7 (1.3%)
Outcomes	Discharge	303 (56.2%)
Left against advice	19 (3.5%)	
Mortality	217 (40.3%)	
Total number of dialysis sessions	4000	
Total hours of dialysis sessions	15,445 hrs	
Total number of beside dialysis sessions	2047 (51.1%)	

Conclusions: 1. 51.1% of Hemodialysis sessions were in critically ill patients.
2. 65.6% patients were Maintenance Hemodialysis patients
3. 61.2% of patients had AV fistula.
4. Mortality was 40.3% in this study.
5. Total Bio-medical waste generated for 4000 Hemodialysis session was 4274 kg (1068.5 mg per session).

No conflict of interest

POS-928

EFFICACY OF THE PFIZER/ BNT162B2 COVID-19 VACCINE IN PERITONEAL DIALYSIS PATIENTS



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Introduction: Patients with end-stage renal disease have an increased risk of severe disease when infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Effective vaccination is essential to minimize the consequences of COVID-19 in this extremely vulnerable population. However, chronic kidney disease results in a multifactorial state of immunosuppression and, thus, dialysis patients often present diminished immune response following immunization with various vaccines, frequently requiring alternatives regimens with reinforcement of doses and increased frequency of administration. This study aimed to evaluate humoral response among peritoneal dialysis (PD) patients 6 months after the second dose of the BNT162b2 vaccine.
Methods: We conducted a prospective study including patients on peritoneal dialysis that received two doses of the BNT162b2/Pfizer vaccine, with antibody test results drawn 6 months after the second dose. Patients with previous SARS-CoV-2 infection were excluded. SARS-CoV-2 IgG II Quant (Abbott©) assay was used for measurement of anti-spike IgG antibodies of SARS-CoV-2. The test was considered positive if IgG was above 50 arbitrary unit (AU)/ml. The primary outcome was the rate of seropositivity for anti-spike antibodies.

Results: Twenty-seven PD patients were included, with a median age of 62.5 years (interquartile range [IQR] 18); 60% were males. The overall seropositive rate was 20/27 (74.1%). The median level of anti-S antibody was 203 AU/ml (IQR 332 AU/ml). Seven patients (25.9%) were negative for anti-S antibodies. When compared with the ones who were positive for anti-S antibodies, patients with previous renal transplant (n=4; p=0.042), treatment with low dose corticosteroids (prednisolone 5 mg) (n=3; p=0.012), longer period under renal replacement therapy, including past kidney transplant periods (1.9 [0.5

vs 10.0 [17] years; $p=0.007$), and patients who have been on peritoneal dialysis for a longer period (1.65 [1.0] vs 5.0 [2.0] years; $p=0.01$) were less likely to present an antibody response. Additionally, anti-S antibody levels were significantly lower in patients with past transplants (234 [469] vs 22.5 [67] AU/ml; $p=0.01$) and in patients treated with low dose corticosteroids (220 [454] vs 12 [12] UA/ml; $p=0.008$). Notably, all patients treated with low-dose prednisolone were patients who had a former renal transplant. There was no difference in age, sex, comorbidity index, serum albumin level, body mass index (BMI), or weekly Kt/V. None of the patients were under immunosuppressive therapy or had active malignancy. No patients developed COVID-19 after completion of the vaccination.

Conclusions: Most PD dialysis patients were seropositive 6 months after two doses of the BNT162b2 vaccine. However, some of them showed a weak response. Previous kidney transplant and treatment with low-dose prednisolone were the main factors associated with lower antibody levels and with a lower probability of response. Patients who have been on PD for a longer period also showed lower antibody levels.

Considering these findings, previous transplant patients, who have been under immunosuppressive therapy for long periods in the past, would possibly benefit from a 3rd dose of the vaccine. Furthermore, a 3rd dose may also be considered in long-term peritoneal dialysis patients.

No conflict of interest

POS-929

FOUR CASES OF SEVERE INFECTIONS AFTER RECENT COVID19

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Introduction: Some presentations of SARS cov-2 infections are characterized by inflammatory cytokine storms causing much more morbidity and mortality than direct viral toxicity. This state of hyper-inflammation can occur even after the acute episode of viraemia and can lead to severe infections. This study aims to describe the particularities of certain severe infections in patients with history of recent COVID 19.

Methods: This is a retrospective study, including all patients who developed a COVID19 infection who were hospitalized in our nephrology department between January 2021 and May 2021 who presented during their follow-up severe post-COVID 19 infections.

Results: Sixty eight patients were hospitalized for COVID 19 infection during this period. Eleven patients had died and the others had a good issue with home discharge. During their follow-up, 4 patients (7%) had presented a severe post-COVID19 infection with a mean delay of 5 weeks. In their medical history, COVID 19 pulmonary parenchymal involvement was severe in 2 patients and moderate for the 2 others. The 4 patients had a negative SARS cov 2 PCR test on admission. Mean age was 52 ± 12.3 years. They were men. Three patients had diabetes. Two patients were kidney recipients. Macrophage activation syndrome was diagnosed in two patients. It was secondary to a systemic candidiasis in one patient and to a gram-negative bacillary bacteremia in the other one. These two patients were treated with intravenous immunoglobulins with good outcomes. The third patient (who was kidney recipient) had developed severe varicella treated with aciclovir with good issue. The fourth patient had developed necrotizing fasciitis in his lower right limb treated surgically, but he subsequently suffered from a sensory-motor deficit.

Conclusions: Our experience suggests a causal link between the severity of these infections and the context of post-COVID19 hyperinflammation, particularly in patients with comorbidities.

No conflict of interest

POS-930

ANCA ASSOCIATED VASCULITIS WITH CRESCENTIC GLOMERULONEPHRITIS COMPLICATING COVID 19 IN A 72-YEAR-OLD MAN

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Introduction: There have been increasing reports describing patients with coronavirus disease 2019 (COVID 19) associated with multisystem inflammatory conditions and it has become clear that the virus can affect any organ. The most common histological renal impairment reported in patients with COVID 19 is acute tubular necrosis (ATN). However, Crescentic glomerulonephritis due to vasculitis associated with this virus has rarely been described.

Methods: We noted the clinical, biological, histological and therapeutic characteristics of a patient with pauci-immune crescentic glomerulonephritis associated with COVID 19 who was hospitalized in our nephrology department.

Results: A 72 year old man, with no pathological history, presented to the emergency in February 2021 for fatigue, loss of appetite and weight loss. He was diagnosed with COVID 19 with 40% lung parenchyma involvement in the CT-scan. His biological exam showed renal insufficiency with a creatinine level at 240 $\mu\text{mol/l}$, hypo-albuminemia at 28g/l and anemia at 10g/dl. He was referred to nephrology department but he only consulted 2 months later with persistence of his complaints and appearance of a generalized erythematous cutaneous lesions. On biological exam, he had creatinine level at 316 $\mu\text{mol/l}$, urea=17,6mmol/l, serum albumin =27,4g/l, proteinuria=1,27g/day with 20 red blood cells/mm³ on urine cyto-bacteriological exam. A kidney biopsy puncture was performed showing crescentic glomerulonephritis with chronic lesions and interstitial fibrosis. The direct immunofluorescence was negative. C-ANCA were positive with positivity to anti-PR3. Multiple bilateral lung nodules have been identified on CT-Scan but he had no ophthalmologic or otolaryngologic abnormalities. Corticosteroid treatment has been initiated followed by cyclophosphamide. The patient felt a marked improvement and had a weight gain of 5kg but renal function was still impaired.

Conclusions: It is reasonable to speculate that COVID19 constitutes a possible trigger of ANCA vasculitis and probable glomerular involvement should be considered in patients with COVID19 to ensure rapid and adequate treatment.

No conflict of interest

POS-931

THE IMPACT OF CORONAVIRUS DISEASE 2019 (COVID-19) PANDEMIC ON SURVIVAL OF IN-CENTRE MAINTENANCE HAEMODIALYSIS PATIENTS OF A COVID-19 DESIGNATED HOSPITAL IN MALAYSIA

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Introduction: As part of the national plan to manage the increasing numbers of COVID-19 cases in Malaysia, the Ministry of Health has gazetted four hospitals in Klang Valley to be designated COVID-19 treatment hospitals which include Selayang Hospital. Implementation of this plan, together with the burgeoning COVID-19 cases, affects the treatment and health seeking behaviour of non-COVID-19 patients. We aim to assess the impact of the COVID-19 pandemic on our non-COVID in-centre maintenance haemodialysis (HD) patients.

Methods: We reviewed all in-centre maintenance HD patients in Selayang Hospital from the beginning of the pandemic until August 2021 (*Cohort P*: Jan 1st, 2020 to August 31st, 2021). We subsequently compared this to a pre-pandemic, non-COVID cohort (*Cohort N*: Year Jan 1st, 1998 to August 31st, 1999). We compared their baseline demographics, clinical features, and survival comparison by Kaplan-Meier survival analysis.

Results: There were 105 prevalent in-centre maintenance HD patients in Pandemic cohort (*Cohort P*), and 88 patients in pre-pandemic, non-COVID cohort (*Cohort N*).

There was no significant statistical difference in sociodemographic and clinical characteristics between both groups. Mean age was 51.48 +/- 16.33 years. They were predominantly females (n=98, 57.9%) and Malay in ethnicity (n=116, 56.6%). Primary cause of kidney failure was diabetes mellitus (n=69, 36.5%) and glomerulonephritis (n=37, 14.3%). Median dialysis vintage were 7 years (IQR 3-12). One third (36%) were on peritoneal dialysis prior to transfer to HD, while 8.7% had history of failed kidney transplant.

There were 25 mortalities (including 3 COVID related deaths) in *Cohort P*, and 23 mortalities in *Cohort N*.