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positive at some point. 19 (17.7%) of the 107 employees tested positive for the virus. A total of 3 patients tested positive despite receiving both doses of vaccination. The mean age was 50.46 years, and most of them were men (78.5%). The most common co-morbidity was hypertension (95.2%), followed by diabetes (28.5%). Before being tested positive, patients had been on dialysis for an average of 49.6 months. Most of the patients were hospitalized (99.2%) after being diagnosed with Covid-19. The mean duration of hospitalization was 9.72 days. Of 126 patients on haemodialysis who tested positive for Covid-19, 31 (24.6%) patients expired. Compared to those who survived the illness, the Covid-19 positive patients who died were older (56.64 ± 13.15) vs 48.45 ± 11.5 , $p = 0.001$) and had shorter dialysis vintage (mean 37.67 vs 54 days, $p = 0.05$).

Conclusions: In conclusion, our investigation indicates the increased incidence of COVID-19 infection in populations undergoing haemodialysis. Out of 126 patients undergoing dialysis, all of them tested positive at some point, and the patients who died were older than those who survived (56.64 ± 13.15) vs 48.45 ± 11.5 , $p = 0.001$). Despite nationwide lockdown and disruptions in transportation, we were able to continue our healthcare services at charitable haemodialysis centres without any interruption.

No conflict of interest

POS-953

READMISSION AND OUTCOME AFTER INITIAL HOSPITAL DISCHARGE AMONG END-STAGE KIDNEY DISEASE PATIENTS WITH CORONAVIRUS DISEASE 2019



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Introduction: Early readmission post-hospitalization from coronavirus disease 2019 (COVID-19) has been associated with poor outcomes in the general population and imposes a burden on the healthcare system. To date, there have been limited data on long-term outcomes and readmission after COVID-19 infection in end-stage kidney disease (ESKD) patients. This study aims to determine the rate, causes, risk factors and outcome of 30-day readmissions post-hospitalization in ESKD COVID-19 patients.

Methods: This is a single centre retrospective observational cohort study. ESKD patients who tested positive by polymerase chain reaction (PCR) testing of a nasopharyngeal sample for COVID-19 admitted to nephrology ward Hospital Selayang from 1st May 2021 till 31st July 2021 were recruited. Readmission was defined as a new hospital admission within 30 days of discharge. Demographic, clinical and laboratory data were obtained from the hospital information system.

Results: During the study period, 142 ESKD patients were admitted with COVID-19. During initial hospitalization, 25.4% ($n=36$) patients died. Among the 106 survivors, 16 patients (15%) were readmitted within 30 days of discharge. The majority of patients were male (68.8%, $n=11$), Malay ethnicity (75%, $n=12$) with mean age of 56 ± 13 years old. Hypertension (100%) and diabetes mellitus (50%, $n=8$) were the two major comorbidities present.

The mean time from discharge to readmission was 15.6 ± 7.4 days. The causes of hospital readmission were pneumonia (37.5%, $n=6$), long-covid (25%, $n=4$), bacterial infection (25%, $n=4$) and venous thromboembolism (VTE) (12.5%, $n=2$).

Readmitted patients had a shorter initial hospital length of stay (LOS) compared to those with a single hospitalization with a median of 13 days (Inter Quantile Range (IQR) 12-18) vs 18 days (IQR 13-25). The median LOS upon re-hospitalization was 8 days (IQR 5-10).

Patients who were on pharmacological VTE prophylaxis during index hospitalization have an 88.6% reduced risk of readmission with OR=0.114 (95% CI: 0.034, 0.385). The mortality rate during readmission was 31% with age ≥ 60 years associated with an increased rate of mortality ($p=0.03$).

Comorbidities, COVID-19 disease category, radio-imaging severity, ICU admissions and usage of steroids were not found to have a significant impact on mortality or LOS and risk of readmission.

Conclusions: The 30-day readmission rate is high amongst ESKD COVID-19 survivors primarily due to pneumonia with high mortality in patients aged more than 60 years. The use of anticoagulants is associated with a reduced rate of readmission.

No conflict of interest

POS-954

COVID-19 IN PATIENTS ON PERITONEAL DIALYSIS



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Introduction: After first being identified in Wuhan, China in December 2019, the novel Coronavirus Disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 quickly became a global pandemic. In Malaysia, the general population mortality rate is approximately 1.63% whereas in dialysis patients the mortality rate goes up to 21%, almost similar as data in Italy at the height of the pandemic. In the Nephrology Department Hospital Kuala Lumpur, the Peritoneal Dialysis Units cater for approximately 430 patients on peritoneal dialysis. Hence, Covid 19 poses a significant risk to this population of patients.

Objective: This study aims to study the outcome of COVID-19 patients on peritoneal dialysis in Hospital Kuala Lumpur that may provide additional insights for healthcare providers in managing covid 19 patients.

Methods: This is a retrospective, cross sectional, retrospective study conducted in Nephrology Department, Hospital Kuala Lumpur. Study populations include all End Stage Kidney Disease patients who were admitted to for COVID-19 infection. Data were collected from March 2020 to September 2021.

Results: A total 649 patients with End Stage Kidney Disease (ESKD) were hospitalized for COVID-19. Forty-one patients (6.3%) were on peritoneal dialysis. Amongst peritoneal dialysis patients, mean age was 55 years old (SD= 12.5 years old). Majority of the patients had underlying diabetes mellitus and hypertension at 28 (68.3%) and 30 (73.2%) respectively. Thirty-one patients (81.6%) were of continuous ambulatory peritoneal dialysis (CAPD) whereas only 7 patients (18.4%) were on automated peritoneal dialysis (APD). Most of the patient were diagnosed at Category 1 ($n=12$, 29.3%) and Category 2 ($n=10$, 24.4%). Most of the patients were asymptomatic however for those who had symptoms, they presented with fever ($n=3$, 7.3%) and cough ($n=2$, 4.9%). Mean days of hospitalization was 10.4 ± 8.0 days. There were 145 (22%) End Stage Kidney Disease (ESKD) deaths in which 3 were Continuous Ambulatory Peritoneal Dialysis (CAPD) patients (0.005%).

Conclusions: In conclusion, we observed low numbers of peritoneal dialysis patients infected with COVID-19. In fact, most of them presented with mild or no symptoms at all and the number of deaths is much lower than patients on haemodialysis. Peritoneal dialysis should be considered as the modality of choice for renal replacement therapy as it is home based especially in this era of Covid 19 pandemic.

No conflict of interest

POS-955

THE INCIDENCE OF END STAGE RENAL DISEASE ON PERITONEAL DIALYSIS HOSPITALISED WITH COVID-19: SINGLE CENTERED STUDY



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Introduction: The pandemic of novel coronavirus disease 2019 (COVID-19) is posing a threat to all populations, including patients with kidney failure who require hemodialysis (HD) or peritoneal dialysis (PD). Our study demonstrated the incidence of patients with PD therapy hospitalised for COVID-19 infection and its outcome.

Methods: This was a retrospective single center study recruiting all end stage renal disease (ESRD) patient on peritoneal dialysis (PD) hospitalised for COVID-19 from March 2020 to August 2021 in Hospital Tengku Ampuan Rahimah, Klang, Malaysia. Baseline demographics and laboratory data within 48 hours of hospitalisation were recorded. The outcome of the COVID-19 infection in ESRD patients on peritoneal dialysis was recorded. The data was analysed using the Statistical Package for Social Science version 20.0 (SPSS Inc. Chicago, IL)

Results: We cohorted 38 patients with end stage renal disease on PD hospitalised with COVID-19 (22 males, 16 females). Their mean age was 55.37 ± 12.95 years. Nine of the 38 (23.7%) patients expired while 29 patients (76.3%) were discharged home. Mean length of hospital stay

was 19.39 ± 8.28 days. Six patients were diagnosed with peritonitis during hospitalization and these two patients died. Of these 38 patients, only four patients had completed COVID-19 vaccination.

Conclusions: Further studies with larger samples are needed to understand the nature of COVID-19 infection and the outcome in patients with PD therapy.

No conflict of interest

POS-956

ACUTE HEMATOMA ASSOCIATED WITH PROPHYLACTIC ANTICOAGULATION IN DIALYSIS PATIENTS WITH COVID 19: TWO CASE REPORTS

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Introduction: since covid 19 is associated to a high incidence of thrombo-embolic events, there has been a surge in anticoagulation use for the management of hospitalized covid 19 patients. Yet, anticoagulation is not without risk. Serious hemorrhagic complications may occur and may be fatal. Consequently rapid diagnosis and prompt intervention are essential to ensure good patient outcomes.

Methods: Herein, we present 2 patients with COVID-19 whose clinical course was complicated by spontaneous hemorrhage.

Results: Case 1 : A 62-year-old man diabetic man who has been on regular hemodialysis presented with fever, abdominal pain and shortness of breath. He was diagnosed with COVID-19 pneumonia. The patient was started on a prophylactic dose of calciparine, dexamethasone and supplemental oxygen. During the course of hospitalization, the patient was found to have hypotension with worsening deglobulization. Computed tomography scan of the abdomen and pelvis revealed a large psoas hematoma.

Case 2 : A 60-year-old woman on hemodialysis for end stage kidney disease was admitted for a severe COVID 19 pneumonia. On Day 15 of illness, while on prophylactic anticoagulation, she developed hypotension, sudden onset of abdominal pain and an acute deglobulization. CT scan of the abdomen and pelvis showed a subcapsular hepatic hematoma, a subcapsular splenic hematoma and multiple abdominal wall hematomas.

Both patients were managed conservatively with discontinuation of anticoagulants and red blood cells transfusion. Their condition improved and they were discharged well.

Conclusions: Anticoagulation therapy, while indicated in COVID-19 patients, has its own risks. Bleeding complications could be lethal. Considering that, it's crucial to monitor carefully patients receiving anticoagulation in order to intervene timely in patients who become hemodynamically unstable.

No conflict of interest

POS-957

SURVIVAL ANALYSIS AND RISK FACTOR OF MORTALITY AMONG COVID-19 PATIENTS WITH HEMODIALYSIS IN SANGLAH GENERAL HOSPITAL BALI INDONESIA

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Introduction: Complication for COVID 19 infection not only in lung organ, but can reach far organ such as kidney. Kidney problem can be as complication of COVID 19 infection which is Acute Kidney Injury (AKI), or as comorbid in patient who already has declining of kidney function, Chronic Kidney Disease (CKD). In AKI complication, often patients need renal support when metabolic and fluid problem beyond than kidney ability to handle. CKD patients who in hemodialysis (HD) treatment are population

in high risk to infected COVID-19. Both AKI and CKD conditions in COVID-19 infection which need HD treatment will affect the course of disease, length of stay in hospital, morbidity and finally mortality. Our aim is to determine survival rate patients COVID-19 who had HD treatment during their stay in hospital.

Methods: This was a retrospective cohort study on COVID-19 patients who had HD treatment during in isolation room from June 2020 until June 2021 at Sanglah General Hospital Bali Indonesia.

Results: We collected data from 157 patients who had HD in isolation room. Baseline characteristics were age 56 ± 11.29 years old, e-GFR 9.24 ± 14.13 ml/1.72m², BUN 199.96 ± 958.98 mg/dl, serum creatinine 10.32 ± 6.04 mg/dl, pH 7.33 ± 0.11 , sodium 134.56 ± 10.20 mEq/L, potassium 4.62 ± 1.10 mEq/L and mean length of stay in hospital was 13 days. Overall survival patients in 10th, 20th, 40th, 50th and 60th days in hospital were 75%, 38%, 29%, 29% and 29% respectively. We divided indication of HD in two group, emergency HD and regular HD. Emergency HD is HD as indication acute metabolic or fluid state and regular HD is HD in patient who already in HD treatment previously. Regular HD patients had 15 days longer survival rather than group of emergency HD (26 days; 95%CI 15-36 vs 11 days; 95%CI 9-13; p<0.001). Based on cut-off value 63 years old or more (75th percentile), patient's age less than 63 years old had better survival compare to age more than 63 (17 days; 95%CI 13.74-20.26 vs 11 days; 95%CI 8.99-13; p<0,001). After controlling by levels of serum sodium, potassium and acid base status, relationship in addition to emergency HD (OR 2.2; 95% CI 1.43-3.5; p<0.001), age older than 63 years (OR 1.67; 95%CI 1.14-2.44; p<0.001), sodium levels less than 135 mEq/L (OR 1.6; 95%CI 1.07-2.38; p=0,02) were significant independent risk factor for mortality.

Conclusions: COVID-19 infection patients who had undergo HD during in isolation have better survival in the first 10 days of treatment. Emergency HD, age older than 63 years old, sodium levels less than 135 mEq/L were significant risk factor for mortality.

Key word : COVID-19, hemodialysis, survival, HD indication, age and hyponatremia

No conflict of interest

POS-958

CORONAVIRUS-DISEASE 2019 (COVID-19) IN CHRONIC PERITONEAL DIALYSIS POPULATION: CHARACTERISTICS AND OUTCOME

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Introduction: End stage kidney disease (ESKD) patients have been facing high Covid-19 transmission rate due to regular visits to haemodialysis centre for kidney replacement therapy (KRT). Many studies demonstrated poor prognosis in haemodialysis cohort. Its effect on patients on peritoneal dialysis (PD) is still unknown. This study is to describe the clinical course of the disease, risk factors and mortality rate of PD patients with Covid-19.

Methods: This is a single centre observational cohort study of all Hospital Selayang adult PD patients from 1st January 2021 till 31st August 2021 who contracted Covid-19 infection from the PD Covid-19 database. Electronic medical records were used for data collection. Baseline demographics, clinical course and outcome were documented. Statistical analysis was done using IBM SPSS Statistic version 26.

Results: Of the total 500 adult PD patients under Hospital Selayang follow up, 58 patients (11.6%) were diagnosed with Covid-19 infection during the study period. In this cohort 35 patients were males (60.3%) and mean age was 57.7 ± 12.38 years. The dialysis vintage was 3.1 ± 2.67 years. Self-care PD and assisted PD were distributed equally.

Majority had more than 3 comorbidities (86.2%, n=50). The comorbidities identified were hypertension (82.8%), diabetes mellitus (79.3%), dyslipidaemia (51.7%) and ischaemic heart disease (13.3%). Full Covid-19 vaccination status observed in 27.6% (n=16).

The epidemiology link for Covid-19 infection were family members (56.9%, n=33) followed by contact with positive patients during hospital stay (43.1%, n = 25).