

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. The Kaplan-Meier survival analysis comparing survival of *Cohort P* and *Cohort N* revealed that there is no difference in survival (p=0.788). Survival rates at 20 months for cohort P and cohort N were 75.3% and 76.8% respectively.

Conclusions: Covid-19 pandemic had no significant effect on overall survival rate of in-centre maintenance HD patients during the COVID-

19 pandemic compared to a pre pandemic cohort. No conflict of interest

POS-932

INCIDENCE AND OUTCOMES OF CORONAVIRUS DISEASE 2019 (COVID-19) INFECTION AMONG IN-CENTRE MAINTENANCE HAEMODIALYSIS (HD) PATIENTS IN A TERTIARY HOSPITAL IN MALAYSIA

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Introduction: As of September 2021, there were 2 million confirmed cases of COVID-19 in Malaysia, with mortality rate of 1%. Malaysia is currently facing its fourth wave of COVID infection, with up to 20,000 new cases diagnosed daily. In-centre HD patients are particularly at risk of contracting COVID-19, and has higher complication and mortality rates.

Methods: We performed a retrospective cohort study and reviewed the clinical records of all in-centre HD patients who were diagnosed with COVID-19 in Selayang Hospital, Malaysia from Jan 1st, 2020 to August 31st, 2021. We described their demographic and clinical features, and reviewed the incidence as well as outcomes of COVID-19 infection.

Results: There were 105 prevalent in-centre HD patients in the study period. Their mean age was 51.7 +/- 16.6, predominantly females (52.5% n =53) and Malay in ethnicity (66.3%, n=67). Primary disease causing ESKD were diabetes mellitus (37.6%, n=39) and chronic glomerulonephritis (15.8%, n=16). Median years on dialysis were 7 years (IQR 3-12). The longest dialysis vintage was 32 years. Forty percent of patients were on peritoneal dialysis before transferred to HD, 10.5% had history of failed kidney graft. Twenty-two non-COVID related mortalities were reported in the study period, with mortality rate of 22.9%. Majority (79.2%, n=19) of mortalities occurred in-hospital, while the remaining were brought in dead (BID). The main causes of death were acute coronary syndrome (52.6%) and sepsis (31.6%).

There were 20 patients diagnosed with COVID-19 during the study period, with incidence rate of 19%. They were mainly diagnosed in May 2021-August 2021 (80%, n=15)(*Figure 1*). Majority were admitted (95%, n =19) with 25% having mild COVID-19 disease (Category 1-2). Majority (47.4%, n=9) were diagnosed with COVID Category 3 on admission. Diagnosis was made from symptomatic screening (50%, n=10) and close contact tracing (20%, n=4). A quarter (n=5) contracted COVID-19 in a healthcare facility. There were 2 COVID related mortalities (10%). We did not find any significant association between baseline demographic and clinical factors and mortality, likely due to the small study population.

Number of Confirmed COVID-19 cases in Hospital Selayang and Malaysia

Figure 1: Number of Confirmed COVID-19 cases in Hospital Selayang and Malaysia. The majority of COVID-19 cases in HD Unit Hospital Selayang were diagnosed in June-Aug 2021 (Black line). This coincided with the fourth wave of COVID-19 pandemic in Malaysia (Grey line). Cases in the HD unit reduced significantly after completion of the COVID vaccination programme in June 2021 (Arrow).

Conclusions: One-fifth of our in-centre HD patients were infected with COVID-19, with a mortality rate of 10%. This is significantly higher compared to the national mortality rate of 1%.

No conflict of interest



LOW DOSE COLCHICINE PROPHYLAXIS FOR SEVERE COVID-19 PREVENTION IN PATIENTS ON HEMODIALYSIS



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Introduction: Some RCT have shown lower clinical deterioration rate in COVID-19 patients randomized to colchicine (GRECCO-19) and also have shown a better survival rate. A more recent study (COLCORONA) has shown no difference in the primary endpoint of the study that was a composite of death or hospitalization by Day 30. We conduct an observational proof of concept study to evaluate the efficacy and safety of low dose colchicine as a prophylactic agent to prevent severe SARS-CoV-2 infection in end stage kidney disease (ESKD) patients on maintenance hemodialysis (HD).

Methods: Thirty-eight patients with mean age 62.3 ± 10.8 years, 65.8% males and a mean dialysis vintage of 26.8 ± 25 months, with ESKD on maintenance HD at our hemodialysis outpatient unit were studied. Written informed consent was obtained from all patients and all data documented. All patients were administered 0.5 mg of colchicine by a nurse from June 2020 to September 2020, while on dialysis thrice weekly or twice weekly. No loading dose was administered. The dose was chosen based on the available evidence in the literature; during the duration of the study begun none of the patients received any type of the COVID-19 vaccines since vaccines were not available at that time in Bolivia.

Results: From June 2020 to September 2020, 13 patients (34.2%) developed COVID-19, with 12 patients (92.3%) developing mild disease (no or mild pneumonia) and 1 patient (7.7%) developing severe disease (disnea, hipoxia or >50% lung involvement on imaging within 24 to 48 hours), this patient was the only one that required hospitalization and oxygen. No gastrointestinal adverse events including diarrhea were reported. None of the patients die.

Conclusions: Prophylactic use of low dose colchicine in the prevention of severe COVID-19 shows great promise with only one of the ESKD patients on HD studied developing severe disease and requiring hospitalization while on therapy. The preliminary data of our study warrants future randomized trials to validate these findings.

No conflict of interest

POS-934

ATYPICAL MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN (MIS-C) PRESENTING AS GROSS ASCITES IN A CHILD WITH END STAGE KIDNEY DISEASE



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Introduction: Mankind has been ravaged by the novel coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) since 2019. To date, we are still battling with coronavirus disease 2019 (COVID19). Although children seem to experience milder symptoms with acute COVID19 illness, some are burdened by multisystem in-flammatory syndrome in children (MIS-C) that classically observes a temporal relationship with COVID19.

Methods: Clinical data retrieved from medical records and hospital electronic database with permission.

Results: We report herein a 7-year-old incident dialysis patient with an atypical presentation of MIS-C. He had previously experienced recurrent peritoneal dialysis-related peritonitis, which resulted in the removal of his tenckhoff catheter and was subsequently on chronic hemodialysis. He developed COVID-19 pneumonia after adults in the family caught the infection. The child experienced an uneventful recovery with nasal oxygen supplementation and a course of steroids. However, he developed gross abdominal distension approximately three weeks post COVID-19 which was not associated with fever or abdominal tenderness. A bedside ultrasound of the lungs suggested a normohydrated state with no signs of increased extravascular lung water. Simple ascites was demonstrated on ultrasound of the abdomen with a serum-ascites albumin gradient (SAAG) of less than 1.1g/dL and

an ascitic protein of 48g/L. The sample had a normal fluid cytology and was negative for bacterial, fungal and mycobacterial cultures. Interestingly, our patient had remarkably high inflammatory markers ie C-Reactive Protein (CRP) 111 mg/L, Procalcitonin 7.47 ng/mL, D-Dime >7.65 mcg/mL and Ferritin 1650 mcg/L despite the absence of fever. The liver enzymes and complete blood counts were unremarkable apart from transient reactive thrombocytosis. His echocardiogram showed minimal pericardial effusion and the absence of coronary arteries dilatation. In the light of his complex clinical presentation, temporal relation with recent COVID-19 and unexplained signs of hyperinflammation, he was treated with Intravenous Immunoglobulin 2g/kg. Following that, we observed steady improvement of the inflammatory markers and resolution of the reactive ascites. At the time of writing, six weeks lapsed and he remained well on chronic hemodialysis.

Conclusions: In conclusion, the exorbitantly high inflammatory markers and gross ascites otherwise unexplained by another disease proess could reflect an immune dysregulation post COVID-19 or an atypical presentation of MIS-C. Much is yet to be known of this very complex disease in children.

No conflict of interest

POS-935

OUTCOME OF COVID-19 IN DIALYSIS PATIENTS IN KELANTAN

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Introduction: Coronavirus disease 2019 (COVID-19)outbreak had occurred since December 2019 and rapidly spread worldwide including Malaysia. Chronic kidney disease and kidney failure are substantial comorbidities that are associated with untoward outcomes in patients with COVID-19. Kidney failure is an independent risk factor for severe COVID-19 disease presentation and mortality after accounting coexisting comorbidities. Therefore, the purpose of this cross sectional analysis is to study outcome of COVID-19 patients on dialysis in Kelantan that will give additional sight for healthcare providers in managing COVID-19.

Methods: This study is retrospective cross-sectional study. The data collected from 1st April 2020 till 15 April 2021 via patient's record during admission. Aim of this study is to assess outcome of all patients confirm COVID-19 that underwent dialysis durinng admission using perform. The data analysis done using Spss version 25.0. Results shown via descriptive and categorical data.

Results: In Kelantan, total of 3143 patients admitted for COVID-19 from 1st April 2020 till 15th April 2021. There were 48 (1.5%) patients requiring dialysis during COVID-19 admission. Their demographic data, comorbidities, length of hospital stay, length of Intensive Care Unit stay and discharge or death were collected. All were Malays, mean age was 59.9 years old, 22(45.8%) male patients, 26 (54.2%) were female patients. Among 48 patients on dialysis, 33 (68.8%) patients were End Stage Renal Disease and 15(31.2%) patients were Acute Kidney Injury. Majority of them had Hypertension 95.8%. The mean severity of COVID-19 was Category 4. Mean total length of hospital stay was 13 days. There were 26(54.2%) patients. on dialysis requiring admission to Intensive Care Unit (ICU) ; 14 (53.8%) were ESRD and 12(46.2%) were AKI. There were 10 (30.0%) ESRD patients and 8 (53.3%) AKI patients died due to severe COVID-19 infection.

Conclusions: COVID-19 infection carries high mortality especially among AKI and ESRD patients.

No conflict of interest

POS-936

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CLINICAL COURSE AND OUTCOME OF HEMODIALYSIS PATIENT WITH COVID 19: REPORT FROM AN URBAN CENTER OF DHAKA CITY



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Introduction: Patients with chronic kidney disease (CKD), particularly those on maintenance hemodialysis, are at a higher risk of developing severe coronavirus disease 2019 (COVID-19). Morbidity and mortality have always been significantly higher in the CKD population, particularly those

on renal replacement therapy. Currently, data on the course and outcome of this patient population from developing countries is insufficient. **Methods:** We conducted a single-center, retrospective, observational study on patients from a large hemodialysis center in Bangladesh. Pa-

tients on maintenance hemodialysis were enrolled in the study, and those who died as a result of COVID-19 infection were compared to those who survived. Demographic data, concomitant co-morbidities, clinical presentation, laboratory results, hospital course, and outcome (including length of hospital stay or death during illness) were compared.

Results: There were a total of 209 patients on maintenance hemodialvsis, 100 of whom were diagnosed with COVID-19, and 61 of them required hospitalization, with 24 requiring critical care management. In total, 41 people died. The median age of the deceased was 68years (IQR 62-73) in relation to its survivors (61 years; IQR 56-69), closely linked to older patients were vulnerable for mortality (p=0.035). Delay in presenting to the hospital was related with increased mortality (8.68±10.8 day) among the deceased compared to survivors $(4.42\pm7.3 \text{ days})$ (p=0.021). Ischemic heart disease and bronchial asthma were more common in the deceased group, although hypertension and diabetes mellitus were more common among survivors. Fever and respiratory symptoms were the most prevalent complaints, and breathlessness was notably more common among the deceased (p=0.001). Patients with neutrophilic leukocytosis at presentation had a higher death rate (p= 0.001), which was corroborated by raised procalcitonin levels (9.14±20.2 compared to 7.99±21.9 among survivors) and higher D-Dimer $(4.23\pm4.42 \text{ compared to } 1.85\pm1.55 \text{ among survivors})$. In terms of treatment, the deceased group used more anticoagulants (p=0.020) and IL-6 inhibitors (0.002). Survivors had a shorter hospital stay (23.4 ± 5.5 days vs. 25.6 ± 5.6 days for the non-survivors).

Conclusions: During the COVID-19 pandemic, approximately 50% of our dialysis patients were infected, and the mortality rate was higher as previously reported. Because we face difficulties preserving social distance and severe COVID-19 regulations as a developing country, community spread was the most significant difficulty in our patients. Early admission to the hospital and beginning of appropriate therapy can reduce mortality, and home treatment for patients with multiple comorbid diseases is discouraged.

No conflict of interest

POS-937

"#LOOKING_TO_STAY_CONNECTED": CHARACTERISTICS OF PATIENTS WITH ESRD AND FAMILY CAREGIVERS WHO SIGNED UP FOR AN ONLINE INTERVENTION DURING THE COVID-19 PANDEMIC



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Introduction: Research has evidenced that the COVID-19 pandemic brought several additional challenges for patients undergoing hemodialysis (HD) (e.g., increased difficulties managing dietary and fluid restrictions, decreased physical activity) and their family caregivers (e.g., additional care responsibilities, increased burden). At a time when diverse educational and emotional needs arise, access to health services is hampered by policies adopted to contain the spread of the virus, such as lockdown and social distancing. Consequently, several digital health services, such as online support groups, have been developed to facilitate the management of end-stage renal disease (ESRD) demands. The purpose of this study was to explore the main characteristics of patients undergoing HD and family caregivers who signed up for an online psychoeducational group intervention during the COVID-19 pandemic.

Methods: An advertisement announcing the opening of registration to participate in an online psychoeducational group intervention was placed on a website (www.togetherwestand.pt) designed to inform patients undergoing hemodialysis and their family caregivers. A webbased questionnaire was sent to the e-mail address provided by individuals at the time of registration, including questions related to sociodemographic (e.g., age, gender, education level), clinical (e.g., interdialytic weight-gain), and caregiving information (e.g., time providing support). The Hospital Anxiety and Depression Scale was also used to assess the presence of symptoms of anxiety and depression.