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.

APACHE II and SOFA scores 72 hours post hemoperfusion, length of hospital stay, outcomes between early and late referral for hemoperfusion, outcomes between two brands of hemoperfusion cartridges, and overall outcome among treatment combinations with hemoperfusion.

Results: A total of 93 COVID-19 patients were referred throughout the entire duration of this study. Out of the 93, only 74 patients were included, of which, 69 underwent hemoperfusion (HP group) while only 5 opted not to proceed with hemoperfusion (non-HP group). There were 65 confirmed and 9 suspected cases. Forty-seven percent of the participants belonged to ages 41- 60 years, 58% were male, and 82% were married. Majority complained of dyspnea (43%) followed by cough (23%), fever (12%), and body malaise (9%). The top two comorbidities were hypertension (66%) and diabetes mellitus (51%). There were 25 (34)% patients who underwent hemodialysis, of which 16 (23%) were diagnosed case of end-stage renal disease on maintenance hemodialysis while 9 (13%) were initiated on hemodialysis, of which 8 were due to acute kidney injury and 1 patient due to chronic kidney disease. None of the patients who did not undergo hemoperfusion underwent hemodialysis. The average length of hospital stay for the HP group was 19.28 +12.24 days while for non-HP group was 19.28 +12.71 days. Majority of patients were classified as severe (42%) and critically ill (49%). In terms of the overall outcome, in the HP group, 43 (62%) recovered patients and 26 (38%) expired, while out of the 5 patients in non-HP group, 2 (40%) recovered and 3 (60%) expired.

Conclusions: This study showed that the use of hemoperfusion incurred a higher chance of survival compared to those who did not undergo hemoperfusion. Early referral for hemoperfusion within the first 48 hours may also lower mortality rate with a higher recovery rate although this may require further investigation. Among those who underwent hemoperfusion with at least 5 subjects, its use in combination with Dexamethasone and Remdesivir showed the highest survival rate among patients. The use of hemoperfusion markedly decreased inflammatory markers after 72 hours regardless of the brand of hemoperfusion cartridge used.

No conflict of interest

POS-946

PERITONITIS RATES IN CHILDREN ON CHRONIC PERITONEAL DIALYSIS DURING THE COVID 19 PANDEMIC- OBSERVATIONS FROM AN UNDER-RESOURCED REGION

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Introduction: The COVID-19 pandemic imposed significant restrictions in access to health care facilities. Being a large referral center for pediatric chronic ambulatory peritoneal dialysis(CAPD) in the region, children residing in rural and distant areas form major beneficiaries of our program. This study was undertaken to estimate and compare peritonitis rates and associated risk factors in children on CAPD during the covid pandemic to the pre-covid period.

Methods: This single center retrospective study included children (0-18 years) on CAPD from January 2019 to August 2021. The prevalence of peritonitis from April 2020 to August 2021 (COVID pandemic) was compared to the prevalence of peritonitis from January 2019 to March 2020 (pre- covid). Peritonitis was defined by the ISPD guidelines. Risk factors for peritonitis, dialysis and patient outcomes were compared between the two time periods.

Results: During the covid period, 38 children (incident and prevalent) median age 11(9,13)years, 15(39.8%) girls on CAPD for 15(12.5,15) months were analysed. Congenital abnormalities of the kidney and urinary tract (CAKUT) was the most common etiology(n=11, 28.9%). Nine children(23.6%) had 14 episodes of peritonitis(Gram positive-1, gram negative -5, no growth -9) The rate of peritonitis was 2.76 episodes per patient month. The risk factors were cuff extrusion/exit site infection in 3, touch contamination in 1 and change of caregiver in 1 patient. Peritonitis resolved in 6(66.6%), 2 required catheter removal and 1 needed catheter reinsertion. During this period, 4(10.8%) children underwent kidney transplantation, 2(5.2%) died due to causes other than peritonitis and 8(21%) children were lost to follow up. In comparison, during the pre-covid period 43 children (incident and prevalent) median age 11 years(9, 13.5), 14(32.5 %) girls with 15(13.5,15) months of CAPD were included. CAKUT was the most common etiology(n=11, 25.5%). Four children(9.3%) had five episodes of peritonitis(gram positive -2, gram negative-1, fungal-1, no growth-1). The rate of peritonitis was 0.8 episodes per patient month. Risk factors included cuff extrusion in 2 and touch contamination in 1 patient. Peritonitis resolved in 2(40%), 1 required re-insertion of catheter and 1 required catheter removal. Two children underwent kidney transplantation and two died due to causes other than peritonitis.

Patients in the two time periods were comparable by age, gender, duration of dialysis and risk factors for peritonitis($p>0.05$). Peritonitis rate was significantly higher during the covid period when compared to the pre-covid period($p=0.002$). The median number of hospital visits in the covid period (2(1,4) was significantly lower than the pre-covid period 4(1,6) ($p=0.04$). The number of re-trainings done were lower in the covid period (1(0,3) compared to the pre covid period (2(0,4) but not statistically significant($p=0.07$). Five home visits were conducted during the pre-covid period, while none were conducted during the covid period.

Conclusions: Children on CAPD belonging to under resourced region experienced higher rates of peritonitis covid pandemic compared to the pre- covid period. Loss to follow up and lower hospital visits were challenges perceived in the covid phase. Tele- PD monitoring could be a potential solution to sustain optimal care of children on CAPD.

No conflict of interest

POS-947

UPDATE ON COVID 19 INFECTION AMONG HAEMODIALYSIS PATIENTS OF A SPECIALISED KIDNEY HOSPITAL IN BANGLADESH BETWEEN 2020 TO 2021

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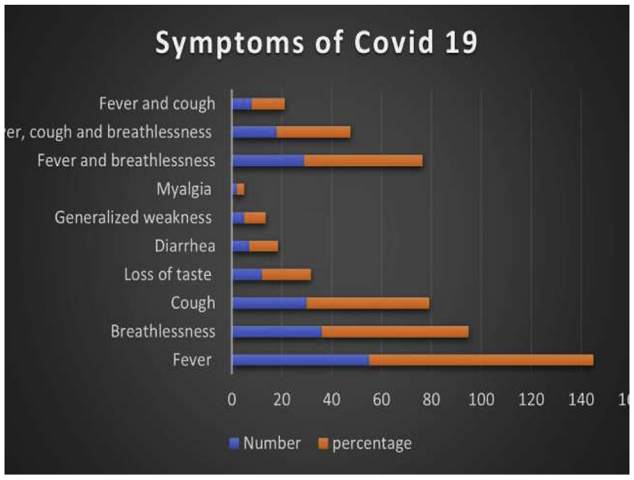
Introduction: Novel coronavirus SARS-CoV-2 has continued to place immense stress on healthcare systems worldwide including low middle-income countries like Bangladesh. Haemodialysis patients continue to be a vulnerable group that needs extra attention to provide a safe and healthy environment for their better survival.

Methods: This is a prospective study among haemodialysis unit in one of the largest tertiary kidney hospitals of Dhaka, Bangladesh. The study period was from May 2020 to August 2021. The patients were tested based on their presentation of classical symptoms and parameters suggestive of COVID-19.Nasopharyngeal samples reverse transcriptase–polymerase chain reaction (RT-PCR) method. Demographic, clinical, laboratory, radiological outcome, treatment data and vaccination status were collected through the review of the medical records.

Results: Total 1314 patients were tested. 1186 (90%) patients were admitted and 128 (10%) were tested at outpatient Haemodialysis unit.133 (10%) patients tested positive for Covid-19.17new haemodialysis patients less than 3 months, 4 CAPD,3 Kidney Transplant patients, 1 prospective kidney Transplant Donor, 25 chronic kidney disease patients, 2 Acute Kidney Injury patients and 18 were unknown. Total 61 (4.64%) maintenance haemodialysis patients tested positive for Covid-19 45%. The average age was 51 ± 14 years (18 to 81). 39(63.9%) male and 22(37.5%) female positive patients. Total 57(87.5 %) patients required hospitalization. The average duration of symptoms was 13±5 (4to 21).The most common symptom was fever 55(90%) followed by breathlessness 36(59%), cough 30(49.2%) loss of taste 12(19.7%), diarrhea 7(11.5%), generalized weakness 5(8%) and Myalgia 2(3%). 29 (47.5%) patients had both fever and breathlessness, 18 (29.51%) had fever, cough and breathlessness and 8 (13.11%) had only fever and cough. 52 (85.3%) patients had chest x-rays done. 30 (57.7%) patients had bilateral pneumonic changes, 8 (15.4%) had unilateral consolidation, 14 (26.9%) chest x-rays were normal and 4 (6.6%) were unreported. The average haemoglobin was 8.4 ± 1.2mmol/L. Total leukocyte Count was 9.09 x 109/L ± 4 x 109/L (Neutrophil 76.84%, Lymphocyte – 17.06%). CRP was done in 43(70.5%), 37(86.4%) patients had raised CRP with a mean of 68.7 mg/dl ± 57.5 (215 to 1.4). Treatment administered in Covid-19 patients were oxygen inhalation 46(75.41%), antibiotics along with oxygen therapy in 45(73.77%), Plasma therapy 2(3.3%) along with oxygen therapy and antibiotics and 2 received antivirals (3.3%). 16 (26.22%) patients died,7 from acute respiratory distress syndrome secondary to Covid-19 pneumonia, 3 had Acute myocardial Infarction,3 had cardiac arrest,1 had multiorgan failure and 3 were unknown causes. 42(68.9%) patients are alive,36

(59%) have fully recovered with mild generalized weakness generally. 2 had fistula failure, 1 had acute Myocardial Infarction, 1 developed massive intracranial bleed, massive ascites, and severe reduction in mobility since Covid-19.

81(15.28 %) patients compared to general population 22491063 (13.6%) received 1dose of vaccination.45(73%)haemodialysis patients completed vaccination compared to general population 14684688(9%).



Conclusions: Haemodialysis patients are at high risk of developing COVID-19 with high mortality, 24(11.5%) and 26,22%(16) respectively as compared to the general population of Bangladesh which is 1.76% (26931).

No conflict of interest

POS-948

OUTCOME OF COVID-19 INFECTION AMONG IN-CENTER HEMODIALYSIS AND HOME-BASED PERITONEAL DIALYSIS PATIENTS HOSPITALISED IN NEGERI SEMBILAN: A MULTICENTER EXPERIENCE

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Introduction: Patients on dialysis are particularly vulnerable to coronavirus disease 2019 (COVID-19), with multiple studies describing mortality over 20% worldwide. In-center Hemodialysis (HD) patients face a higher risk of morbidity and mortality compared to home-based Peritoneal Dialysis (PD) patients. We describe the outcomes of COVID-19 infection among our in-center HD and home-based PD patients and their contributing factors.

Methods: This retrospective observational study included all COVID-19 hospitalization among End-Stage Kidney Disease (ESKD) patients on maintenance dialysis. Clinical, laboratory, and demographical data were obtained from four main centers in Negeri Sembilan from 1st February 2020 till 31stJuly 2021.

Results: In our state, we had a total of 206 patients with ESKD on maintenance dialysis hospitalized for COVID-19 infection. The majority of our patients were male 114 (55.3%) and Malay ethnic 140 (68%). In-centre HD patients were older (57 ± 12 vs 49 ± 13 years) compared to home-based PD with an almost similar rate of comorbidities in both groups. PD patients had milder COVID-19 presentation 8 (36%) compared to HD 32 (17%). Both HD and PD patients received supportive medical therapy as the main treatment for COVID-19 infection, {100 (54%) and 13 (59%)} respectively.

Among COVID-19 admissions, we found higher admissions for in-center HD patients 184 (89%) compared to home-based PD patients 22 (11%). However, PD patients 20 (91%) required longer duration of hospitalization (>7 days) compared to HD 143 (78%) with both having equal need for mechanical ventilation {3 (14%) and 23 (13%)} respectively. In hospital mortality {35 (19%) vs 2 (9%)} and post COVID-19 mortality {7 (5%) vs 0 (0%)} was higher in HD compared to PD patients.

Factors associated with in-hospital mortality for our patients were age (P=0.02), COVID-19 category (P<0.001), the requirement of mechanical ventilation (P<0.001), Absolute lymphocyte count (ALC) (P=0.001), Absolute neutrophil count (ANC) (P<0.001), C-reactive protein (CRP) (P<0.001) and albumin levels (P=0.009).

On multivariate analysis, an increase in age for 1 year was associated with higher mortality (OR 1.046; 95%CI 1.007-1.086; P=0.02), the requirement of mechanical ventilation (OR 17.431; 95%CI 5.740-52.932; P<0.001), the value of ALC (OR 0.381; 95%CI 0.168-0.865; P=0.02) and value of CRP (OR 1.009; 95%CI 1.004-1.013; P<0.001) showed significant impact on mortality. Vaccination and other comorbidities such as diabetes and hypertension did not have any influence on mortality and duration of hospitalizations.

Conclusions: COVID-19 mortality was higher among In-center HD compared to home-based PD patients but did not reach statistical significance. Age, clinical severity, and laboratory values played a significant role in the mortality of ESKD patients hospitalized with COVID-19 infection.

No conflict of interest

POS-949

CLINICAL SPECTRUM, INVESTIGATION PROFILE,TREATMENT RESPONSE AND PROGNOSIS OF COVID 19 IN RENAL TRANSPLANT PATIENTS

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Introduction: Covid 19 is a pandemic which has lead to global health crisis. The clinical presentation of COVID 19 may range from asymptomatic carrier to a severe ARDS and also with multisystem involvement. Among patient with renal transplants who are under immunosuppressive medicines covid 19 infection may manifest as a comparatively more severe disease compared to immunocompetent patients. So management of these patients needs to be clear in order to control the infection and at the same time prevent the graft loss which is common after reducing dose of immunosuppression drugs.

Methods: This is a descriptive cross sectional study done in the tertiary care hospital, NIMS located in Hyderabad, Telengana, India. The study period was from April 2020 to May 2021. All renal transplant patients diagnosed to have COVID positive by either Rapid antigen testing, RT PCR or HRCT(Typical of COVID-19) who were admitted to our hospital were taken in to the study. Post admission all necessary investigations were sent and data collected. People who had mild symptoms have been followed up in OPD basis, reports collected and analyzed. Patient who recovered were also followed up for next few weeks to look for long term complications of COVID-19. Total of 36 patients were included in the study.

Results: Among 36 patients who were in the study the average age group was 27 years. 32 patients were male(88%)and 4 patients were female(12%). 9 patients were deceased donor renal transplant and 27 patients were live related renal transplant patients. 11% patients had severe disease and needed mechanical ventilation. 14 % had moderate disease. CT was CORADS 4/5 in patients with severe disease. 3patients who had severe disease expired. 6 out of 36 patients had decline in graft function during the illness.

Conclusions: Covid 19 is as such a serious medical illness. The high dose immunosupression medications in renal transplant patients has definitely made these patients more susceptible to severe illness, higher mortality rates compared to the general public.

No conflict of interest

POS-950

COVID-19 IN END STAGE KIDNEY DISEASE WITH RENAL REPLACEMENT THERAPIES: OUR EXPERIENCE IN PENANG

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Introduction: COVID-19 infection in End Stage Kidney Disease (ESKD) patients is associated with increased disease burden and higher mortality rates. The aim of this study is to describe the clinical characteristics and outcomes in this group of patients. A particular focus has also