



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 infection no related to any other infection the patient might have when the patient was admitted to the facility.² Central line-associated bloodstream infections (CLABSIs) lead to prolonged hospital stays and increase health care costs and mortality. In the USA, CLABSI rate in intensive care units is estimated to be 0.8/1000 central line days.^{2,3} Our study is only 2.31% of infection and no differences between temporary, tunneled, and among temporary with different location. CLABSI is a major cause for longer hospital stay, increased costs, and the high mortality rate. The CLABSI is reported to cause up to 70% of all hospital-acquired infection. In comparison, 2012, Cipto Mangunkusumo Hospital Jakarta, Indonesia reported a BSI rate of 12.88/1000 catheter days, and then a slight decrease in 2013 to 10.53 BSIs/1000 catheter days.³

Conclusions: The insertion hemodialysis vascular access catheter was newly reported about 2 years in Banjarmasin, Indonesia. There were no differences of infection between tunneled, temporary, and different location in temporary catheter insertion. There were very low incidences of acute complications during catheter insertion, such as bleeding and malposition, and no mortality was caused by catheter insertion.

References

1. Santoro D, et al. Vascular access for hemodialysis: current perspectives. *Int J Nephrol Renovasc Dis.* 2014; 7:281-294
2. Ziegler MJ, et al. Attributable mortality of central line associated bloodstream infection: systematic review and meta-analysis. *Infection.* 2015; 43:29-36.
3. Rundjan L, et al. Closed catheter access system implementation in reducing the bloodstream infection rate in low birth weight preterm infants. *Front Pediatr.* 2015; 3:1-7.

No conflict of interest

POS-655

CLINICAL PROFILE AND OUTCOMES OF PATIENT ON MAINTENANCE HAEMODIALYSIS HOSPITALIZED WITH COVID 19 AT A TERTIARY CARE CENTRE



M S, DS*¹, chikkanayakanahalli gurusiddaiah, S¹, Aral, K², shankar, M¹, v, L¹, Lingaraju, U¹, Mehta, R¹, muniannaiah, K³

¹Institute of Nephrourology, Nephrology, Bangalore, India; ²Institute of Nephrourology- bangalore, nephrology, Bangalore, India, ³Bangalore medical college, Medicine, Bangalore, India

Introduction: Coronavirus disease (COVID 19) caused by an enveloped RNA betacoronavirus ,first identified in Wuhan has had devastating effects worldwide which rapidly turned into a pandemic. Patient with kidney disease specially those are on maintenance haemodialysis have abnormalities in innate and adaptive immune response. Hence the objectives of this study is to study the clinical profile and outcomes among these patients.

Methods: 100 patients after screening medical records who are known case of chronic kidney disease on maintenance haemodialysis with COVID 19 who fulfill the inclusion criteria hospitalized at a tertiary care centre in south India was included. Diagnosis of COVID 19 was confirmed by Rapid antigen test or COVID 19 Reverse Transcriptase Polymerase chain reaction (RT PCR). At the time of admission after noting the baseline characteristics including all the comorbidities, clinical condition was categorized based on the ICMR COVID 19 national task force guidelines as mild, moderate and severe disease.

Inflammatory markers like ferritin ,lactate dehydrogenase, C reactive protein ,Procalcitonin, Interleukin 6 levels was done in relevant cases. Outcomes like whether the patient condition improved or worsened or discharged with Covid negative status or death at the end of 2 weeks was assessed.

Results: Out of 100 patients, 70 were male, 30 were female. Mean age of patients was 47.7 ± 14.58. Hypertension was seen in 92, 38 had diabetes. 22 had IHD. 33 had other comorbidities. 42 had fever, 52 had cough, 70 had dyspnea, anosmia in 6, sore throat in 6 patients, diarrhoea in 13 patients, 31 had vomiting and myalgia in 23. 5, 31, 29 and 35 patients had Asymptomatic, mild, moderate, severe disease respectively. Median values of Hemoglobin-8.6, total count- 6900, platelet count-1.91, RBS-156, urea 126, creatinine - 8.1, CRP - 120, D dimer-0.96, LDH-427.5, ferritin-1230,

fibrinogen-446, PT -11.7 seconds, INR-1.1, APTT-31.0. At the end of 2 weeks 16 patients expired and rest 84 were discharged in stable condition. Patients with severe disease had higher inflammatory markers and multiple comorbidities. All 16 patients who expired had severe disease requiring mechanical ventilation. During the above study period total number of COVID cases other than study subjects was 4891, deaths were 1133 among them i.e 25 %, which is higher than the study subjects. **Conclusions:** Patients with kidney disease on maintenance hemodialysis had higher inflammatory markers and higher comorbidity burden, they had higher odds of in hospital mortality. But when compared to other population, mortality among study subjects was less.

No conflict of interest

POS-656

THROMBO-ELASTOGRAPHY GUIDED CORRECTION OF COAGULOPATHY PRIOR TO TUNNELED HEMODIALYSIS CATHETER PLACEMENT IN PATIENTS WITH LIVER DISEASE



SOHAIL, MA*¹, Vachharajani, TJ², Lane, JE³, Mucha, S³, Kapoor, A³, Dugar, S³, Hanane, T³

¹Cleveland Clinic Foundation, Internal Medicine, Cleveland, United States; ²Cleveland Clinic Foundation, Nephrology and Hypertension, Cleveland, United States, ³Cleveland Clinic Foundation, Respiratory Institute, Cleveland, United States

Introduction: There is limited evidence about the role of routine correction of coagulopathy in patients with liver disease prior to tunneled hemodialysis catheter (TDC) insertion. Traditional tests for hemostasis have not been shown to successfully predict bleeding risk in liver disease. Thrombo-elastography (TEG) provides a more comprehensive assessment of coagulation dynamics. We hypothesize that using a TEG-guided transfusion strategy will lead to judicious use of blood products compared to conventional transfusion therapy in the peri-procedural period of TDC insertion by accurately identifying those patients at higher risk for bleeding.

Methods: We reviewed all patients with liver disease between January 2015-August 2021 who had their coagulopathy addressed prior to TDC insertion either by a TEG-guided or a conventional transfusion strategy (using INR, fibrinogen and platelet count). Patients with reaction (R) time of >15 minutes, α -angle of <45 degrees and maximum amplitude (MA) of <30 mm received fresh frozen plasma (FFP), cryoprecipitate and platelet transfusions respectively. The transfusion protocol for low-bleeding-risk procedures as outlined by the Society of Interventional Radiology was the 'conventional' transfusion strategy employed. Outcomes such as the volume, units and cost of blood products were compared when using a TEG-guided or conventional approach to blood transfusions. Each FFP, cryoprecipitate and platelet unit was considered to cost \$57, \$54 and \$522 respectively as reported by the 2017 National Blood Collection and Utilization Survey.

Results: We collected data on 108 patients who underwent TDC insertion after utilizing either a TEG-guided (n=56) or conventional (n=52) transfusion strategy for correction of coagulopathy. Baseline patient characteristics and median values for TEG parameters and conventional coagulation parameters are illustrated in Table 1. The mean volumes (standard deviation: [SD]) of FFP, cryoprecipitate and platelets transfused per patient in the TEG-guided transfusion group were significantly lower than the corresponding mean volumes of blood products transfused in the conventional transfusion group {FFP [26.8 (SD:140.4) ml vs. 221.2 (SD:327.1) ml, (p=0.001)]; cryoprecipitate [17.9 (SD:65.0) ml vs. 62.5 (SD:109.3) ml, (p=0.011)]; platelets [16.1 (SD:68.2) ml vs. 63.5 (SD:123.7) ml, (p=0.014)]}. Consequently, the average cost of blood product transfusions per patient in the TEG guided transfusion group was also significantly less than in the conventional transfusion group {FFP [\$6.11 (SD:32.02) vs. \$50.42 (SD:74.58), (p=0.001)]; cryoprecipitate [\$38.57 (SD:140.33) vs. \$135.00 (SD:236.11), (p=0.011)]; platelets [\$27.96 (SD:118.60) vs. \$110.42 (SD:215.26), (p=0.014)]}. No significant differences in catheter related complications, including bleeding (p=0.658) or thrombosis, were observed between the two groups.