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Introduction: Acute kidney injury is challenging in the context of the COVID-19 pandemic. Up to 30% of critically ill COVID-19 patients develop AKI. Thus, it is imperative to find out what factors are associated to more severe and life-threatening infections of COVID-19 in these patients. We also aimed to compare chest CT images in AKI and non-AKI patients in the COVID-19 setting. The aim of this study was to investigate the clinical and computed tomography (CT) features associated with poor prognosis in COVID-19 patients developing AKI.

Methods: A retrospective cohort study was conducted at Imam Hussein medical center. 351 patients with COVID-19, including 100 AKI cases and 251 non-AKI cases, were enrolled. The inclusion criteria were: 1-minimum age of 18 years, 2-peripheral oxygen saturation below 90% (measured via pulse oximetry), categorized as severe COVID-19. Chronic kidney disease was the exclusion criterion since these individuals are more likely to develop severe forms of COVID-19. The demographics, paraclinical and clinical data and chest CT images of them were reviewed and compared.

Results: Compared with the non-AKI group, the AKI patients had older ages and a higher incidence of certain comorbidities, such as hypertension and cardiovascular disorders. Also, in AKI patients the inflammatory markers like CRP, LDH, PCT, and Lactate level, were significantly higher than those of the ordinary patients (P<0.05). In addition, AKI patients showed higher incidences of lymphopenia (P=0.018) and leukocytosis (P=0.023). In AKI group, the CT-scores were significantly higher than those of the non-AKI group (P < 0.001), and severe CT-scores were mainly associated with AKI. ROC analysis showed that 71.4% sensitivity and 90% specificity for CT scores higher than 13 in the AKI group. Out of all measured parameters, CT-score and the level of PCT, lactate, and WBC were the most reliable factors for predicting mortality in AKI patients.

Conclusions: In conclusion, we found that AKI was a relatively common finding among patients hospitalized with COVID-19. Moreover, in addition to patients' clinical condition, CT score, PCT level, lactate level, and the presence of leukocytosis are applicable as possible prognostic factors to distinguish severe disease in patients more accurately. Providing more care to such patients can reduce mortality and improve outcomes. Consequently, clinicians should apply these parameters to assess disease severity in COVID-19 patients with AKI in the early stages to be able to treat them properly. No conflict of interest

POS-872

POST COVID VACCINATION- NEW ONSET GLOMERULONEPHRITIS- A MERE COINCIDENCE OR A IMPEPING REALITY??

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Introduction: India is world’s second most populous country with tropical climate and highly dense overcrowded areas which make it an easy target for spread of covid infection. As a preventive measure the government of India launched a vaccination drive from 16th January 2021, currently as of September 2021 more than 806 million doses of the approved vaccine- (covishield- astra Zeneca and covaxin- bharat biotech) have been given. They are both adenovirus carrying viral load and inactivated vaccine respectively.

Methods: We will now describe a series of 7 cases of immunogenic glomerulonephritis response following covid vaccination which have been admitted in our tertiary care hospital in southern India between a period of January 2021- September 2021 with signs and symptoms of any of the following nephritic/ nephritic syndrome, rapidly progressive glomerular disease, isolated proteinuria, hematuria, acute kidney injury and thrombotic complications. All these patients had a similarity in common- all had received single/ 2nd dose of covid vaccine in the last 15 days before the onset of symptoms. All Patients underwent renal biopsy for histological confirmation of the diagnosis as well as covid antibody level testing to see for any relation between the two.

All characteristics of the patients including the baseline characteristics- complete blood picture, serum creatinine, electrolytes, 24 hour urine proteinurea. The vaccine type and duration of appearance of symptoms, the renal biopsy findings, the management of each patient and their outcome have been described in the table attached. we had case series of 7 patients with different presentation of glomerulonephritis in the past 9 months with a history of temporal association with covid vaccination in last fortnight.

Conclusions: The Immunonephrology Working Group of the ERA-EDTA recently published recommendations on the use of COVID-19 vaccines in patients with autoimmune kidney diseases and supports the vaccination of all individuals without known contraindications. However, these recommendations did not advise on whether vaccination with one vaccine platform was preferable to another. Vigilance should be exercised in patients presenting with new-onset urinary abnormalities and hypertension following COVID-19 vaccination. Besides urinary tract infection and urological causes, glomerulonephritis should be considered in patients with non-resolving macroscopic hematuria. Proteinuria and active sediments in urine. Meanwhile, these isolated reports should not lead to vaccine hesitation during this pandemic as the benefits of vaccination strongly outweigh potential risks.

No conflict of interest

POS-873

COVID-19 OUTCOME IN KIDNEY ALLOGRAFT RECIPIENTS, A REPORT OF A REFERRAL CENTER

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Introduction: The pandemic of SARS Cov-19 (COVID-19) has affected millions of individuals and resulted in 3 percent mortality worldwide. Kidney allograft recipients are at increased risk of mortality and morbidity in COVID-19, due to their immunosuppressed and cardiovascular conditions.

Methods: This study evaluated the outcome of renal allograft recipients with COVID-19 in a single referral center. Seven thousands, seven hundred and forty one patients with COVID-19 admitted in Firoozgar Hospital from March 2019 to September 2021. Among them 59 were kidney allograft recipients with the age range of 18-76. We reported our outcome as the mortality during hospital stay. Acute kidney injury once diagnoses was confirmed patients were started on immunosuppression in form of steroids, plasmapheresis and other supportive measures like ACE/ ARBs. Their outcomes were recorded serially as to whether complete/ partial or no remission was achieved.

Results:
and severity score were defined based on KDIGO and WHO classification, respectively. Our Therapeutic management included low dose CNI and antimetabolites withdrawal. The selection of steroid dose was related to severity score. Critical and severe patients received methylprednisolone pulse for three consecutive days.

**Results:** Fifty nine renal allograft recipients were included in this study, 38 (64.5%) were male and 21 (35.6%) were female. The most frequent comorbidities were diabetes mellitus (32.5%) and hypertension (30%). The mortality rate was 22% (13 out of 59). Forty six (78%) patients were discharged from the hospital with good condition. According to defined WHO classification severity score, 15 (25.4%) had mild, 14 (23.7%) moderate, 17 (28.8%) severe, and 13 (22%) were in a critical situation on admission. Acute kidney injury developed in 13.6% of patients. Univariate analysis showed that Severity score, age, transplant duration, CRP and lymph/neutrophil ratio, LDH, and need for intubation were the major predictive risk factors of mortality (P < 0.05).

**Conclusions:** The mortality rate in hospitalized kidney allograft recipients was 1.5 to 3 fold higher than general population. Those with acute kidney injury need long term follow up for the detection of permanent sequel. As the COVID-19 infection in renal allograft recipients considerably increases the risk of morbidity and mortality, these patients should be monitored closely to prevent poor outcomes.

No conflict of interest

**POS-875**

**THE CLINICAL PROFILE AND OUTCOME OF PATIENTS WITH COVID 19 WHO UNDERWENT HEMOPERFUSION IN BATAAN GENERAL HOSPITAL AND MEDICAL CENTER**

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**Introduction:** The outbreak of COVID-19 was declared a pandemic without definitive therapies. Extracorporeal blood purification has been proposed as one of the therapeutic approaches in patients with COVID-19 because of its beneficial impact on elimination inflammatory cytokines. Considering the association of increased cytokine release with severity of COVID disease and the effect of hemoperfusion on removal of these cytokines, this study was conducted to determine the outcome of hemoperfusion in patients with severe and critical COVID admitted at Bataan General Hospital and Medical Center (BGHMC).

**Methods:** Convenient sampling was done in this retrospective study from August 2020 to November 2020. A total of 29 patients (10 severe, 19 critical) were included in the study. Patient underwent 2 to 4 hemoperfusion sessions using HA1330 cartridges. Baseline characteristics of participants were noted including age, gender, and comorbidities. crates were noted and laboratory parameters were recorded including CBC, BUN, creatinine, SGPT, and SGOT. Primary outcome variables include the following: change of pneumonia severity on chest x-ray, oxygen saturation, length of hospital stay, and mortality. Secondary outcomes measured prior to, and after each hemoperfusion sessions, included inflammatory markers such as LDH, ESR, ferritin, CRP, procalcitonin, and D-dimer.

**Results:** The age of the subjects ranged from 46-79 years old with mean age of 65. Majority of patients were male. Severe cases belong to age group 46-64 years old while most of critical cases belong to age group >65 years old.

Baseline laboratory showed mean elevation of the following parameters: CRP, ferritin, LDH, SGOT, SGPT, creatinine, WBC, neutrophil, procalcitonin and D-dimer. LDH significantly decrease throughout the 4 cycles of hemoperfusion, most significant post 3rd cycle (p 0.01). There was likewise significant decrease in CRP (p 0.002), ferritin (p 0.007), ESR (p 0.01), LDH (p 0.02), SGOT (p 0.001) and SGPT (p 0.001) after 4 cycles of hemoperfusion.

Plain Chest CT scan showed ground glass opacities in both lung fields in all subjects with significant regression of infiltrates seen after 3rd hemoperfusion among severe (p 0.003) and critical cases (p 0.005). All patients initially had desaturations with average paO2 of 76.8±3.8±8.3. Marked improvement in oxygenation status were seen after the 3rd hemoperfusion (p 0.003).

Nine out of ten (90%) severe cases and three out of nineteen (16%) critical cases survived. All patients were given the same regimen of antibiotics, enoxaparin, multivitamins, dexamethasone and hemoperfusion.