resuscitation, 8 sessions of daily SLED hemodialysis were performed, continue with alternate day HD. After 14 days hospitalization, blood result showed increase of BUN 50 mg/dl, serum creatinine was 7.1 mg/ dl, a metabolic acidosisf rom blood gas analysis then death occured after mechanical ventilator was used to improve respiratory failure. Amphetamines represent a class of psychotropic compounds, widely abused for their stimulant, euphoric, anorectic, and in some cases, emphathogenic, entactogenic, and hallucinogenic properties. Renal complication as result of AMPs use are associated with hyperpyrexia and fibrinolysis (disseminated intravascular coagulation; DIC). Also, microvascular obstruction secondary to DIC, myoglobinuria, systemic hypotension or hyperpyrexia may lead to acute renal failure which is generally presents as AKI, hyponatremia, and hypertension



Figure 1. Gross haematuria



Figure 2. Hypertermia patient

Conclusions: A 24-years-old man came with AKI due to amphetamine intoxication. Initial management was fluid and electrolyte resuscitation, and 13 sessions of HD. Deterioration of conditions and death occured due to multiorgan failure.

No conflict of interest

POS-047

INCIDENCE OF ACUTE KIDNEY INJURY IN A COVID-19 HOSPITAL IN THE NORTH OF MEXICO



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Introduction: During 2020 the COVID-19 pandemic has brought an immeasurable burden on hospitals end medical services worldwide. One of the most frequently involved organ is the kidney (2nd place) and acute kidney injury plays a key role for increasing morbidity and mortality. The time and the risk factors for AKI development are important for optimal and effective treatment. In our institution nephrologist are in the front line and first-hand information site every day with a multidisciplinary team.

Methods: Retrospective, observational and descriptive study of patients from March through June 2020 were included totaling 352 patients with the diagnosis of SARS-COV-2 pneumonia in the University Hospital "Dr. José Eleuterio González", with positive PCR test. The data were collected in retrospective with a submitted protocol to investigation department. No intervention was performance.

Results: Woman composed 51%. The most common age-group was 50-59 years (24%), followed by 40-49 (19%) and 60-69 (17%), with a total of 60% from 40 to 69 years. The most common comorbidities were diabetes, obesity and cardiovascular disease adding up for all 30%, although 16% had 2 or more comorbidities. Upon admission 33% presented with any stage of AKD; CKD in 41/352 (12%) and AKI in 76/ 352 (21%). About AKI, KDIGO 1 was the most common 55%, KDIGO 2 34% and KDIGO 3 11%. From KDIGO 1 16.6% developed KDIGO 3. A total 49 patients' required Kidney replacement therapy (KRT), from these 61.2% died before discharge. 20% of the patients were under continuous replacement therapy (CRRT). From 352 patients only 163 patients had a urinalysis at hospital admission, 64.4% had proteinuria and 43.5% had haematuria. All patients with hematuria had AKI, 68% KDIGO 1 and 29% KDIGO 3. 25% of KDIGO 1 subsequently developed KDIGO 3. From all the patients without haematuria only 11% develop AKI and the majority were KDIGO 1. Need of respiratory support (supplementary oxygen, mask, high flow Oxygen and invasive mechanical ventilation) were required for 179 patients from these 24% required mechanical ventilation and 46% of them develop AKI KDIGO 3 with KRT.

Conclusions: AKI is frequent in patients with COVID-19 pneumonia, KDIGO 1 is the most common presentation. Patients with hematuria at admission have a greater tendency to develop AKI. Patients with mechanical ventilation have greater risk to develop KDIGO 3 and also needs kidney replacement therapy. The urinalysis could be very useful as well as the collaborative work, and both cases the initial performance should be encourage. The absence of haematuria could be a good prognosis factor for AKI development but more data is need it.

No conflict of interest

POS-048

RENAL RECOVERY FROM ACUTE KIDNEY DISEASE SECONDARY OF COVID-19 PNEUMONIA WITH CONTINUOUS RENAL REPLACEMENT THERAPY AND TRANSITIONAL HYBRID THERAPY, A SUCCESS CASE REPORT



Rizo Topete MD, L*¹, Romero, P¹, Arriaga, H¹, Arriaga, G¹ ¹UANL, Hospital Universitario "Jose Eleuterio Gonzalez", Nephrology, Monterrey, Mexico **Introduction:** At the end of 2019 in Wuhan, China the first case of atypical pneumonia for SARS COV 2 was diagnosis, since then the hospitals around the world have been fighting with a huge wave of complicated patients for COVID-19 disease. Acute kidney injury (AKI) is one of the most common complications and increase substantially morbidity and mortality. If AKI prolonged more than 7 days became acute kidney disease (AKD) increasing the treatment challenge to the renal recovery path, on this behalf we share our success case report.

Methods: A 58-year-old man with medical history of hypertension treated with losartan 50 mg twice per day, overweight and 15-year history alcoholism suspended 3 years ago. He presented a clinical picture characterized by dry cough, odynophagia, and fever 4 days prior to admission. He was admitted to hospital with MRC3 scale of dyspnea. At admission his temperature was 37.8 C, respiratory rate of 32 breaths per minute, heart rate 110 beats per minute, oximetry 88% in ambient air and blood pressure 160/90 mmHg. At the same time auscultation rales bilateral crackles were found. A CT scan showed a bilateral interstitial pneumonia with ground glass opacities

Results: The diagnosis of Pneumonia due to SARS-CoV 2 was confirmed by oropharyngeal swab for SARS-CoV-2 RNA. He requires orotracheal intubation and mechanical ventilation on the fifth day of stay, as well as vasopressors due to septic shock. In conjunction with the ventilatory problems, renal function declined substantially, on the sixth day of stay it was classified as KDIGO 3 renal injury (4.4 creatinine) meriting continuous renal replacement therapy with venous venous hemodiafiltration modality, 30 ml/kg/ hr dosis with Oxyris membrane for 48 hours. Because of he presented an improvement in hemodynamic status, kidney replacement therapy was continued with sustained slow efficiency dialysis (SLED) 3 days and then conventional intermittent hemodialysis sessions every 48-72 hours because persistent oliguric AKD.

On the other hand, 5 days after intubation he developed a bacterial infection by acinetobacter baumanii, for which he required an antimicrobial regimen with colistin. A tracheostomy was performed by prolonged intubation and he continued with conventional hemodialysis. After 20 days, the ventilatory support managed to withdraw. The pneumonia associated with mechanical ventilation was resolved and on the 28th day of hospital stay, the patient recovered renal function, therefore the hemodialysis sessions were suspended and catheter was retired with a creatinine of 2.2 and recovery of diuresis. The patient was discharged in good clinical condition and without renal replacement therapy.

Conclusions: Renal recovery after acute kidney disease is a challenge and one of the known mean target of patient centered attention. A good kidney outcome is important from nephrology point of view even though the survival is the goal of the multidisciplinary team. In the COVID-19 disease the kidney is one of the most common organ involve included in multiorgan failure and kidney replacement therapy is need it very often. The optimal dose and modality of dialysis is also important to try to improve kidney outcomes and dynamical assessment should be encourage to achieve it, the adsorption therapies are an emerge resource to improve this critical ill patients and can help to get success as in our patient.

No conflict of interest

POS-049

SUCCESSFUL MULTI ORGAN SUPPORT THERAPY (MOST) IN COVID-19 PNEUMONIA: A CASE REPORT



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Introduction: Patients with severe COVID-19 pneumonia can develop acute respiratory distress syndrome, which triggers respiratory failure. Extracorporeal organ support therapies (ECMO, CRRT, plasmapheresis) can be used as part of adjunctive management in patients with refractory hypoxemia even with the appropriate use of optimal mechanical ventilation (IMV) and pharmacological measures.

Methods: We describe a case of a 31-year-old man with a history of morbid obesity admitted for respiratory failure due to Covid-19 pneumonia. Upon admission, he is managed with mechanical ventilation and because his poor evolution and hypoxemia; it was decided to start ECMO therapy within the first 24 hours of admission; subsequently, management with CRRT with prismaflex and oXiris filter with CVVHDF modality is initiated in the second day of hospitalization. One day later, treatment with plasmapheresis is also applied. The patient presents a rapid clinical improvement and a significant decrease in inflammatory markers so it was decided to withdraw ECMO and CRRT on the fourth day of admission, and VMI 24 hours later.

Results: The clinical deterioration of patients with COVID-19 is believed to be a result of an inflammatory state caused by a cytokine storm. CRRT with oXiris filter has been associated with a significant reduction in cytokine and endotoxin levels thanks to its extracorporeal purification capacity; it is being used for hemofiltration due to the high capacity to adsorb endotoxins and cytokines. On the other hand, plasmapheresis treatment also eliminates inflammatory mediators by replacing plasma containing these molecules with albumin.

Conclusions: Management with ECMO has shown benefits as a salvage therapy in patients with severe hypoxemia despite use of IMV. The success of these treatments depends largely on the early onset of ECOS in the critically ill patient. Starting them at the most opportune time, as in our case, is key to the patient's clinical improvement.

No conflict of interest

	IMV	IMVECMO	IMVECMOCRRT	IMVECMOCRRTPlasmapheresis	IMVPlasmapheresis	Plasmapheresis
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Hemoglobin(g/dL)	14.3	13.7	11.4	10.1	-	9.6
Leukocytes(K/mL)	8.52	10.09	5.88	9.16	-	10.64
Lymphocytes(K/uL)	0.44	0.56	0.57	0.60	-	1.01
Creatinine(mg/dL)	0.82	0.83	3.01	2.59	1.08	1.29
BUN(mg/dL)	11.8	16	43.9	40.7	17.7	21.7
Alkaline phosphatase(U/L)	94	85	60	52	-	26
LDH (U/L)	903	1126	1087	897	-	487
C-reactive protein (mg/L)	207.36	205.65	-	57.3	-	-
Interleukin 6 (pg/mL)	-	-	-	505.7	167.5	177