

CRITICALLY ILL PATIENTS WITH COVID-19 PNEUMONIA REQUIRING RENAL REPLACEMENT THERAPY WITH OXIRIS MEMBRANE IN A THIRD LEVEL HOSPITAL IN NORTH-EAST MEXICO

Rizo-Topete, L.; Borbolla, P.; Samaniego, B.; Torres, F
Internal Medicine

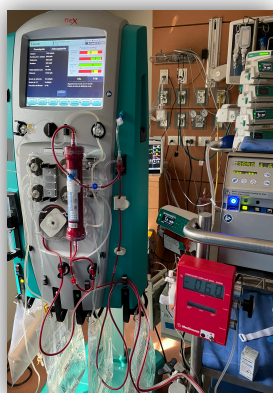
Christus Muguerza Hospital Alta Especialidad. Universidad de Monterrey

BACKGROUND

Approximately 5 to 10% of patients with AKI require RRT during their stay in the ICU. The mortality of these patients ranges from 30 to 70%. A factor that these patients commonly present is hemodynamic instability. Continuous renal replacement therapy (CRRT) has provided physicians with a versatile tool for the care of critically ill patients with hemodynamic instability. The CRRT presents different modalities for its application and allows the use of different membranes and cartridges, which is why it is frequently used in patients with multiple organ failure and sepsis.

The pathophysiological understanding of this last entity has generated new strategies as a measure for the decrease of inflammatory cytosines. For these reasons, the TRRC has earned a place in the ICU during the SARS-CoV-2 pandemic. Currently, a mortality of 50% is described in the patient with critical Covid-19 and a decrease in it has been reported when they undergo CRRT with the use of the oXiris® membrane. Therefore, the following study was carried out to describe our experience with the oXiris® membrane in patients with Covid-19 in the ICU of a tertiary hospital in northeast Mexico.

METHODS



Observational, retrospective and analytical study. Thirteen patients older than 18 years hospitalized in the ICU with a diagnosis of Covid-19 by real-time PCR test were included, who required CRRT with the oXiris® filter between January 2020 and August 2021. Sociodemographic data, number of days total hospital stay (EIH) and ICU; duration and specifications of the TRRC, and its outcome.

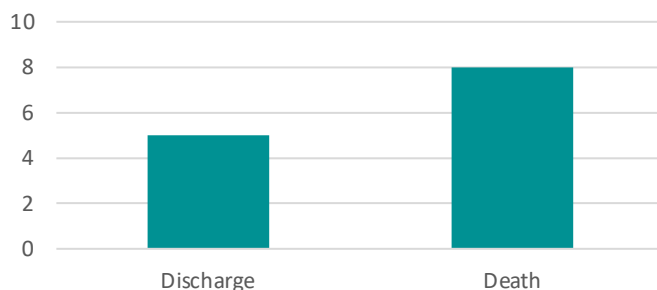
RESULTS

13 patients were included, of which 10 were men (76.9%). The mean age was 59.4 ± 12.9 years. The most frequent comorbidities were arterial hypertension (53.8%) and type 2 diabetes mellitus (38.4%); in 7 and 5 patients, respectively. The mean EIH was 60.3 ± 44.9 and 45.8 ± 30 days in the ICU. The median duration of the days with CRRT was 8 (3-11). The main indication for the initiation of CRRT was anuria (61.5%), followed by fluid overload (23%) and uremia (15.4%). Of the total population, 4 (30.7%) recovered kidney function, 5 (38.4%) were discharged with intermittent hemodialysis, and 8 (61.5%) died. In the first 48 hrs of the initiation of CRRT with oXiris® the vasopressor requirements decrease besides the creatinine and urea.

	n(%)	Media ± Ed	Median (p25-p75)
MALE	10 (76.9)		
IMC		59.4 ± 12.9	
DM		32.5 ± 6.8	
HTA	7 (53.8)		
CKD	3 (23)		
Q-SOFA			2 (1.25 - 2)
DAYS IN TRRC			8 (3 - 11)

TABLE 1: Demographic data.

Outcomes



Graphic 1: Outcomes

CONCLUSIONS

Despite the use of the oXiris® filter in the patient with critical covid-19, mortality exceeds 50%, even if there is a good response in hemodynamical improvement at the beginning of the therapy. We consider that this outcome is dependent on multiple comorbidities and clinical situations not included, so its application should continue to be investigated.