

EFFECTIVENESS OF HEMOPERFUSION ON HEMODIALYSIS (HD) PATIENTS WITH COVID-19 INFECTION.

I. Griveas, E. Pratilas, G. Asimakopoulos*

Nephrology Department Army Share Fund Hospital of Athens, Greece (417 NIMTS)

Objective : Our Nephrology Department during spring period on the first wave of COVID-19 was the referral Dialysis Unit for Covid-19 positive hemodialysis (HD) patients in the district area of Athens, Greece. We used hemoperfusion (HP) as a therapeutic option in our patients. The aims of this study are to report characteristics, rates and outcomes of all patients affected by infection with SARS-CoV-2 undergoing HD and were treated under our care focusing on the impact of HP on them.

Methods: This is an observational study. Our Dialysis Unit has been assigned as a referral unit for Covid-19 positive HD patients. Patients divided to 2 groups: first group of patients underwent HD sessions with Hemoperfusion (A) and the second one received HD sessions without any other extracorporeal blood purification method (B). We used resin-directed hemoadsorption cartridges (HA-330 and HA-130) manufactured by the Jaftron Biomedical Company, China. We registered all the data regarding the clinical course of our patients population. Age, primary cause of end stage renal disease, weight, clinical presentation, HD history, outcome, days of hospitalization.

Results: *Group A:* 13 patients (4 males) have been enrolled in this group with mean age of 74 years old. 5 of them were presented asymptomatic at admission and 7 of them admitted with or developed during their stay pleural effusions. 4 of them were asymptomatic without effusions during the whole hospital stay.

12 patients received HP for 3 hours in our Dialysis Unit during the planned HD session and one patient received Hemoperfusion in ICU during CRRT.

6 patients had one session of Hemoperfusion (with HA130, 4 patients and with HA 330, 2 patients).

6 patients had 2 sessions (7 days interval) either with HA 130 both sessions (3 patients) or with HA 330 followed 7 days after with HA 130 (3 patients).

The patients that admitted in ICU started HP the third day of her admission. The pattern was as follows:

We used HA330 in 3 consecutive days during CRRT. In Day 10 we used HA130 and in Day 13 HA330. HP was performed for 3 hours. 24 days was the average hospitalization stay before starting HP for the 12 patients in boards. 9 patients discharged from the hospital after 43 days of hospitalization (range: 35-56 days). 30 days were the mean hospitalization stay for the deceased ones.

We did not observe any side effects with HP cartridges (hypotension, reduction of platelets, bleeding).

Group B : 9 patients (7 males) with mean age of 75 years old did not receive HP during their hospitalization. All of them were presented symptomatic. 8 out of 9 patients died after 6 days of hospitalization (range: 1-14 days), 2 of them in ICU.

Conclusions: To sum up, HP seems to be a helpful, safe and quite efficient tool in the battle against Covid-19 in HD patients. Despite the method is unspecific, our lack of strong evidence, our views are with the opinion that is a reliable alternative therapy. However, the real impact of HP on the patient's clinical course (time of initiation, therapeutic protocols, tools to evaluate response) has yet to be determined. The above notice does not minimize the great interest for the method that renal community should give.

39th Vicenza Course

on

AKI & CRRT

VIRTUAL MEETING

OCTOBER 26-29, 2021