The Evolving Practice of Nephrology During the COVID-19 Pandemic in Brunei Darussalam

To the Editor: Brunei has the fifth highest incidence of kidney failure globally.[1] There have been significant changes in nephrology practice locally since the second wave of the pandemic in August 2021. As of September 27, 2021, we have recorded 6700 COVID-19 cases (1.5% of the general population) with 29 deaths (0.4%).[2] Eighteen patients (2.3%) on hemodialysis (HD) became COVID-19 positive with a 33% mortality rate, consistent with the reported literature;[3] however, only 1 patient (1.1%) on peritoneal dialysis (PD) turned COVID-19 positive.

Several strategies (Table 1) have been implemented to reduce COVID-19 transmission in our dialysis facilities. One HD center has been converted into a national quarantine HD center. Owing to severe nursing shortage and as a last resort, we have reduced the HD frequency in all patients to 5 hours twice weekly, with monitoring for hyperkalemia and increased weight gain. Preliminary data have not shown any significant increase in the incidence of hyperkalemia and hospitalization for fluid overload. Screening of asymptomatic patients using the rapid antigen test before each HD session has been implemented in all HD centers. We have detected 5 COVID-19 cases out of the nearly 5000 tests done till date.

During this crisis, all elective surgeries have been suspended. We have successfully lobbied the government to resume laparoscopic PD catheter insertion. PD is prioritized over HD for all patients on incident dialysis. Suitable patients for HD are identified and converted to PD. By the end of 2021, we expect a >60% increase in PD prevalence. Patients are trained on continuous ambulatory PD because of the shorter training time required. Clearance measurements and positron emission tomography are deferred. Patients on epoetin-β have been switched to Mircera to reduce clinic visits.

As advocated by ISN, COVID-19 vaccination is prioritized for our dialysis population through in-center vaccination.[4] With this initiative, we have boosted the 2-dose vaccination rate among the dialysis population from <5% to >70% in less than 2 months.

The lasting effect of COVID-19 will continue to impact all aspects of nephrology. As we move into uncharted territory, we will need to explore creative ways with flexible and clear strategies to implement dialysis care and for emergency preparedness in the future.

Table 1. Strategies to reduce COVID-19 transmission in hemodialysis facilities

Advice patients to stay at home and not turn up at dialysis facility if unwell.
Ensure triaging (contact and travel history, fever, influenza-like illness) before allowing entrance into the facility.
Security checkpoints to ensure no patients on quarantine order are allowed entry to the facility.
Physical distancing in waiting areas.
Every patient to use a fixed station throughout, preferably with the same nurse, for ease of contact tracing if needed.
Compulsory wearing of surgical masks by all patients throughout the HD sessions.
Discouraged to eat or drink throughout the HD sessions.
No visitor policy.
Educate all staff on the importance of hand hygiene and use of PPE.

HD, hemodialysis; PPE, personal protective equipment.

DISCLOSURE

All the authors declared no competing interests.

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