

A summary of the guidelines by the Chinese Society of Nephrology and the Taiwan Society of Nephrology

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The Novel Coronavirus 2019 Epidemic and Kidneys.

Kidney Int pre-proof)

1. A working team consisting of dialysis physicians, nursing staff and technologists should receive training in updated clinical knowledge of epidemic COVID-19, notification of infection at risk, epidemic prevention tools, and guidelines from the government, academic society, and hospital authority. The list of staff should be recorded and be retained by dialysis hospitals.
2. Information on travel, occupation, contacts, and clusters history (TOCC) of each medical staff, dialysis patient, their family members, residents of the same institution, and colleagues at work should be collected and updated regularly.
3. Latest care recommendations and epidemic information should be updated and delivered to all medical care personnel as needed. Training can be done peer to peer or online.
4. Group activities, including group rounds, group studies, and case discussions should be minimized.
5. It is recommended that staff members have meals at different time to avoid dining together. Goggles, masks, and hats should be removed before meals, and hands washed with flowing water. Talking during meals should be minimized to reduce the spread of droplets.
6. Staff should self-monitor their symptoms and should inform the team leader in case they or their family members develop symptom(s) suggestive of COVID-19 infection.
7. Entrance control, identification and shunting of people at risk of infection, body temperature measurement, hand washing, wearing proper (surgical or N95) masks throughout the process,

machine disinfection, environmental cleanliness, good air conditioning and ventilation conditions, should be instituted.

8. Patients and accompanying persons should be given hands-free hand sanitizer while entering the dialysis room. Patients should wear medical masks and avoid meals during dialysis. They can bring convenience food such as candy to prevent hypoglycemia.

9. Patients with suspected or confirmed COVID-19 infection should be admitted to negative pressure isolation ward of specified hospitals. If the capacity of the isolation facility is overloaded, the "Fixed Dialysis Care Model" as below is recommended for dialysis patients under the 14-day period of quarantine for possible contact with COVID-19.

10. Place of dialysis treatment: patients should continue hemodialysis at the original hemodialysis center and not change to another center.

11. Dialysis shift and personnel: Do not change dialysis shifts and caregiver staff to avoid cross contamination and infection. Minimize the relevant contacts.

12. Patients who need vascular access surgery should be screened for novel coronavirus before the surgery. Operations on patients with confirmed or suspected novel coronavirus infection should be carried out in a designated room with necessary protection for medical staff.

13. Transportation: Public transport should not be used. Patients should arrange personal transportation and take fixed transportation routes. Transport personnel and escorts should wear surgical grade or N95 masks throughout.

14. All patients who have fever should be screened for novel coronavirus infection, and should be given dialysis in the last shift of the day until infection is excluded.

15. Pass route for entering hospital and dialysis unit: The pick-up and drop-off should not be shared with other dialysis patients. Entering and exiting with other patients at the same time should be avoided. The route, mode and time of transport of dialysis personnel should be fixed.

16. Precautions in dialysis unit: Patients should not be in close

proximity; treatment and waiting areas should have good air conditioning and ventilation to remove droplet particles from the air.

17. Designated care personnel: All personnel involved in direct patient care should undertake full protection, including long-sleeved waterproof isolation clothing, hair caps, goggles, gloves and medical masks (surgical mask grade or above). Hand hygiene should be strictly implemented.

18. Dialysis machine: Equipment that may come into contact with patients or potentially contaminated material should be disinfected according to standard protocols.

19. If a new confirmed or highly suspected case of novel coronavirus infection in dialysis centers is identified, disinfection should be carried out immediately. Areas in close contact with these patients should not be used for other patients until cleared.

20. The medical waste from confirmed or suspected patients with novel coronavirus infection should be considered as infectious medical wastes and disposed accordingly.

Operational strategies for family member and caregivers

1. All the family members living with dialysis patients must follow all the precautions and regulations given to patients to prevent person-to-person and within family transmission of the COVID-19, which include body temperature measurement, good personal hygiene, handwashing, and prompt reporting of potentially sick people.

2. Dialysis patients, who have a family member or caregiver subject to "basic quarantine", can have dialysis as usual in accordance during the 14-day period.

3. Once the family members or caregiver of dialysis patients have been converted to a confirmed case, the patient's identity should be upgraded and treated in accordance with the above-mentioned conditions.