



People on PD should stay at home. Hospital visits should be minimized for only urgent indications (eg suspected peritonitis). Consultations should otherwise be conducted by telehealth

Precautionary measures for PD patients

1. Pre-clinic screening for suspected cases

- Perform preliminary screen for COVID-19 to all patients planning for hospital visits by phone and/or text messaging
 - a) Have they got symptoms?
 - i. Have been unwell with fever?
 - ii. Have acute respiratory infection (e.g. shortness of breath, cough or sore throat) with or without a fever?
 - b) Has someone in their family got COVID related symptoms?
 - c) Have they been in contact with someone who has developed COVID in the last 2 weeks?
 - d) Do they have any travel history in the last 14 days?
- If the patient meets the risk criteria or if they have been unwell with a fever or cough,
 - a) advise the patient to make contact with coronavirus infection services
 - b) if it is clinically necessary for the patient to attend the PD unit (e.g. suspected peritonitis), the patient should be seen with appropriate infection control procedures (see below)

2. Management in PD Unit

- Non-essential procedures e.g. PET, clearance measurement etc should be avoided during the pandemic to minimise unnecessary patient contact
- Consider options to identify people at risk in the waiting area/service provision environment, such as
 - signs (with translations) in the waiting area
 - asking patients at reception whether they, or the person(s) attending the appointment with them, meet the risk criteria
- Seating in the waiting area should be arranged so that people are at least 1.5m apart. A line on the floor will keep people distant to the reception area.
- Once determined as having potential exposure to the virus, or COVID-19 related symptoms, patients should have the necessary viral swabs by the designated team depending on local practice
- All individuals should perform hand hygiene properly with alcohol-based hand sanitizer before they enter the clinic area; in some countries, masks should also be worn.

- Design a one-way, quick workflow in the PD clinic visit, including completing clinical questionnaires, exit-site check, physician consultation and prescription adjustment, and drug dispensing.
- Patient visits should be kept to a minimum and should only be for essential issues such as peritonitis, severe exit site infection, or training new patients. Control the number of patients per clinic session and speed all procedures done during the clinic visit to reduce the number of patients in the waiting area so they can sit further apart
- Individuals should perform hand hygiene when leaving the consulting room after their brief interaction with healthcare providers.

3. *Home-PD management*

- Patients should have at least 2 weeks PD supplies and sufficient medications in case they have to self isolate, or there is a break in the supply chain (eg due to delivery staff sickness)
- Except for very frail or disabled patients who may need organized transport to come to the PD unit, home visits by healthcare professionals should be minimized or stopped
- Patients and their family members are advised to stay at home and limit social activities and gathering to decrease the risk of contact with confirmed or suspected cases of COVID-19.
- Patients or their family members with epidemiological history should inform the PD center by phone and begin self-quarantine for at least 14 days.
- Patients and their family members should practice social distancing and are advised in general to avoid unnecessary touching when going outside or meeting together
- Strengthen education of hand hygiene with liquid soap, washing for at least 20 seconds, and alcohol-based hand sanitizer.
- Patients should report their symptoms and exposure to coronavirus honestly to health workers
- Remote patient management (RPM) should be strongly recommended as the major way to manage patients on PD.
- Nurses should communicate with patients frequently, to distinguish and handle the most dangerous and severe cases in a timely manner. Unexpected or emergency visits should be avoided as much as possible.

4. *Hospitalization of PD patients*

- Elective and non-urgent admissions should be rescheduled, and inpatient elective surgical and procedural cases should be delayed.
- Screening for suspected and confirmed cases with COVID-19 should be performed for everyone before hospitalization

- If PD nursing team is involved with inpatient care, it is preferable to have separate teams responsible for inpatient and outpatient PD care

5. *Diagnosis and treatment of COVID-19 for PD patients*

- Management of COVID-19 infection is the same for PD patients as for all other patients
- Mild or moderate patients on PD can continue PD treatment as usual, with prescription adjustment according to general evaluation.
- Severe or critically severe cases requiring life support due to multiple organ dysfunction syndrome can be temporarily transferred to automated peritoneal dialysis or bedside continuous kidney replacement therapy (CKRT). As in patients on hemodialysis, it is advisable to keep patients ‘dry’, so increased ultrafiltration may be needed if remaining on PD
- There is a variety of opinion for disposal of drained dialysate from PD patients with COVID-19 from doing nothing additional to standard methods or disinfection by adding 500mg/L chlorine-containing solution for 1hr before pouring into the toilet. It is important to emphasize the need to prevent accidental splash when disposing drained dialysate.

Precautionary measures for PD staff

1. *Continue education and training of knowledge about COVID-19*

- Healthcare staff should be educated with the latest knowledge of the disease on a regular basis, since information regarding COVID-19 is continually being updated.
- Stay informed about the local COVID-19 situation and develop or review the facility’s emergency plan.
- Online training is recommended.

2. *Epidemiological history surveillance and self-monitoring for COVID-19 for individual healthcare staff*

- Any member of staff in close contact with someone who has developed symptoms suggestive of COVID 19, or who develops suggestive symptoms should self isolate for the length of time required by their national guideline.

3. *Personal protective equipment (PPE) and hand hygiene*

- PPE should be available for all members of the PD team and used according to their national guidance depending on nature of contact with patient.
- Hand hygiene should be performed (a) before and (b) after every patient contact, (c) after body fluid exposure or risk, (d) after touching a patient’s immediate environment, (e) before clean/aseptic procedures, (f) before wearing and (g) after removing PPE.
- Continuous education and supervision regarding the importance and the recommended approach to hand hygiene, as well as the necessary equipment such as a sufficient number of sinks with

soap dispensers, paper towels, hand lotions and alcohol-based hand sanitizer should be provided in the dialysis unit.

4. *Medical activities and staffing*

- Team meetings, including shift meetings, centralized learning and case discussions should be avoided. Instead, telephone and video-conferencing should be used to communicate with each other if necessary.
- Precautionary measures with social distancing should be taken in daily life
- Healthcare staff should receive adequate rest. Sick employees should be told to stay at home.
- The hospital and dialysis leadership should address and continuously pay attention to both the mental and physical health of the staff.

5. *Environment cleaning*

- Environment service personnel responsible for cleaning and disinfection of high-touch surfaces of the PD unit should also be trained for self-protection, wearing recommended PPE when cleaning and disinfecting the environment and items. PPE should be removed upon leaving the PD unit, immediately followed by performance of hand hygiene.
- Rooms should be ventilated by opening the windows or by turning on an air conditioner with the fresh air system or purification system to ensure air circulation.
- Wipe and disinfect the surface of objects and floor thoroughly before and after each patient visits. Desk surfaces, computer screens and keyboards in office areas should also be disinfected daily and between users
- Perform terminal disinfection immediately with the assistance of infection control experts if there are confirmed or highly suspected cases of COVID-19 in the dialysis center.
- Medical waste generated by confirmed or suspected patients of COVID-19 should be disposed in accordance with local relevant regulations.

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